Our Nutritional Status
Progress or Inertia?
Mission Statement

bridges, the Israeli-Palestinian Public Health Magazine, is a unique publication conceived, written, edited, produced and managed jointly by Palestinian and Israeli academics and health professionals under the sponsorship of the World Health Organization (WHO). The magazine embodies the WHO paradigm of “Health as a Bridge for Peace”: the integration of peace-building concerns, strategies and practices with health care. Developed with health care professionals, decision makers and academics in mind, the magazine covers public health topics relevant to both populations and seeks to analyze the impact of the conflict on the health and well-being of both societies. In both structure and content bridges is a cooperative endeavor seeking to build relationships, links and common understanding.

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Writing an editorial for a scientific magazine is a real hard task. It is even harder to write the editorial for a magazine like bridges, which has a mandate to integrate peace building concerns, strategies and practices with health care and to encourage Israeli and Palestinian professionals to raise public health issues of common concern as well as analyze the impact of the conflict on the health and well-being of both societies.

No matter how conflicts separate and create gaps between people, still common interest and common hardships bring them back together.

Poverty, disabilities and nutrition are the themes of the first three issues of bridges and women’s health will be the topic of the next issue. These topics are aspects we deal with through our daily lives, without thinking of borders, gender, color and ethnicity.

The feedback we have received so far is very positive and encouraging, indicating that the path we have chosen is correct and we shall proceed with our mission, knowing that this demands hard and continuous work. We ask for the support of all health practitioners; we ask them to provide us with new ideas and to use bridges as a source of creative and common activities on the ground. We are grateful to those who have already taken time out from their busy days, like Ted Tulchinsky and Ziad Abdeen, and served as co-editors of this edition of bridges, significantly shaping the content of the following pages.

I would like to thank Marc Lalonde, former Canadian Minister of Health, for giving bridges the opportunity to transfer to our audience the Canadian experience in health promotion and how we can utilize the principles of health promotion to advance peace.

In Dr. Omar Dary’s “how to” article on fortification, he states that 40% of the need for flour in the West Bank is covered by imports from Israel. Therefore, through collaboration between Israel and the Palestinian Authority, imported flour could be fortified according to Palestinian standards. This could eventually lead to an improvement in the nutritional status that prevails in the Palestinian society.

What might come as a surprise to the Palestinian reader, are the facts presented in the article by Kaluski et al, “Challenges Facing the Nutritional Status of Israel”, which show that Israeli society suffers from deficiencies in iron, iodine, vitamin D and folic acid. This common problem shared by the Israeli and Palestinian societies could open the gates for future joint cooperation in order to obtain the most suitable tools to resolve common health problems and at the same time decreasing the costs and effort needed.

One of the main achievements in nutrition has been the ability to focus on the common interests concerning the issue of micronutrient malnutrition through joint conferences as mentioned in the joint article by Tulchinsky and Abdeen. The authors call for the establishment of a joint Israeli-Palestinian nutrition working group, as an advisory body to report regularly to the Palestinian Authority and the Israeli ministries of health and nutritional related issues.

As a Palestinian, I am confident that when my Israeli colleagues read about the extent of diseases related to malnutrition among children, women of child-bearing age and elderly in the occupied Palestinian territory, they will realize that these trends in malnutrition are related to levels of poverty and unemployment never seen to this extent before. The deterioration of social determinants are strictly connected with closures and curfews caused by Israeli military activities.

All health professionals are aware that the continuation of the military measures will intensify the heath crisis and there is no path out, except to end the occupation and having two independent, neighboring states.

Health professionals take advantage of their special position in both societies, and promote this solution, in order to ensure social well-being for Israelis and Palestinians.
Challenges Facing the Nutritional Status of Israel

by Dorit Nitzan Kaluski, Ted Tulchinsky and Elliot M. Berry
Israel shares similar eating and lifestyle habits and effects of socio-economic status (SES) on health with Western Europe. As a multiethnic society, Israel could be used as a living laboratory to study the interactions between cultural determinants, nutritional status and health outcomes. In line with other industrialized countries, Israel has the paradoxical combination of problems of excess caloric intake (diabesity) with those of micronutrient deficiencies. While frank undernutrition is rare, many citizens have suboptimal diets, which may be compared to a car running on “inadequate or low octane fuel”. As a consequence, they are unable to achieve their full physical, cognitive and social potential with a consequent reduction in the human and social capital. At-risk populations include the lower socio-economic sectors and the elderly.

The background health situation is that:

• the major causes of mortality are from cardiovascular disease;
• more than 55% of the adult population is overweight or obese;
• 14% of women above the age of 45 have osteoporosis;
• 10% of adults have hypertension and 5-6% has diabetes (20% above 65 years).
• In women over 75 years, cancer is the leading cause of death. Nutrition and lifestyle have a major impact on the development and progression of these non-communicable diseases.

Nutritional Database

During the past few years, the Ministry of Health has embarked on a series of nutritional surveys of adults, children and the elderly. The First Israeli National Health and Nutrition Survey 1999-2001 (MABAT) (1), was conducted on a representative sample of 3,246 adults (52.4% women) aged 25-64 years old (mean 43 years old). Some of the relevant findings are presented.

Obesity on the Rise

Body mass index (BMI) is an indicator that is calculated by adjusting body weight for height. Thirty-nine percent of the sample was overweight (25 < BMI < 30), and 22.9% (women, 25.8% men, 19.9%) was obese (BMI > 30). Overall, 62.2% of the sample had a BMI 25. The rates of obesity increased with age in both Arab and Jewish population groups and both genders. This trend was particularly noticeable among Arab women – more than 50% of them aged 45-54 and 70% of those aged 55-64 were obese.

After adjusting for age, Arab men were 1.1 times, and Arab women 1.4 times more obese than their Jewish counterparts. Almost 35% of the sample had an elevated waist-hip ratio – over 50% of the women and 15% of men. Among Arab women, 66% had an elevated waist-hip ratio.

Socio-economic status affected women more than men. 36.9% in the lowest tertile for SES had a BMI > 30 compared with 17.7% in the upper one (p < 0.001). The figures for men were 25.3% and 19.5% respectively (non-significant). Multiple logistic regression analysis indicated, that at the same weight, women in the lowest SES were almost four times more likely to be obese than those in the highest SES. These data identified, draw attention to target populations for community interventions.

With regard to children, preliminary data from the Adolescent Health and Nutrition Survey (MABAT Youth), which was carried out on a national cluster sample of 5,268 students between 7th to 12th grades, shows that the situation is better in this age group, compared with that of adults. 4.1% of the sampled population had BMI for age < 5th percentile; 12.8% were at risk for obesity (85 < BMI < 95 percentiles) and 5.7% obese (BMI > 95th percentile). Overall, 18.5% of Israeli adolescents were overweight and obese. Nevertheless, the results differ in different sectors. The prevalence of overweight and obesity in the Arab sector was higher than the Jewish, 21.4% and 15.4%, respectively. Also, the rates were higher among those from lower socio-economic status.

It is important to note that these findings are similar to those from the United States two decades ago. Needless to remind us that the current US rates of overweight and obesity among adolescents of 46% should mobilize us to act today with prevention programs to stop overweight and obesity from growing in our country.

Micronutrient Deficiencies

Risk groups for micronutrient deficiencies (MND) include infants and children, adolescents, adult women and men and the elderly. Some MNDs are best addressed by fortification of basic foods. Others require specific supplements such as vitamin A and D and iron for infants,
which has been part of Israeli public health program for many years. Pregnant women have received iron and folate supplements for many decades and this has contributed to a steady decline in rates of anemia of pregnancy. Various studies other than MABAT in Israel have shown high levels of iron deficiency and anemia, iodine deficiency, vitamin D deficiency, and folic acid and vitamin B12 deficiency and other B deficiencies have occurred in recent years.

The mean folic acid intake in Israel is less than 200 microgram per day in women throughout the population and blood concentrations of folate are also suboptimal. This is surprising considering the wide variety of vegetables available in the market, thus suggesting decreased accessibility to healthy foods. The MABAT data show that the consumption of fruit and vegetables is less than the recommended intake of over 400 g/d. More than 50% of people living below the poverty line consume less than the recommended level. Most of the poor consume less than 380g/d of fruits and vegetables. The situation regarding vitamin B12 intake is similar, reflecting a low intake of meat in these sectors of the population. The socio-economically compromised eat less than 70g/d of meat, poultry and fish. Also, dairy consumption is less than recommended in the lower SES with median consumption of 150 g/d. Clearly, this cannot provide the recommended level of calcium intake. These and other findings lead to a variation in the well-known saying of Brillat Savarin such that “tell me what you eat and I will tell you your socio-economic status.”

Indigenous and Mediterranean Diets

Rapid dietary changes resulting from economic development and market globalization are having a significant impact on the nutritional status of the Israeli population. The process of “nutrition transition” has led the changing nutritional-web since the commencement of the state in 1948. Data from the Food Balance Sheets reveal that in 50 years there has been a marked increased consumption of an energy dense diet, high in fat and sugar. The nutrition transition is marked by a shift away from diets based on indigenous staple foods, such as grains and pulses, fruits and vegetables, towards more global diets that include more processed food, more foods from animal origin, more added sugar, salt and fat. Currently, 70% of the foods are currently imported into the country. This shift, combined with a decline in energy expenditure and leads to a rapid increase in obesity and its associated health problems. Moreover, the dietary habits of the Israeli-Arab community have been moving from the Mediterranean-type diet to ones more like those eaten in northern Europe and the USA. As shown above, the Arab community in Israel is suffering the most from obesity and its consequences.

Plans for the Future

There are many challenges for the future. It is recognized that health and other non-health sectors have prime responsibility for the food chain in Israel. Stakeholders may have contradictory attitudes towards the problem, its causes and solutions. Food producers, importers and farmers may advocate the need to promote individual choice, knowledge and physical activity, while ministries, academia, health professionals, human rights advocates and consumers may emphasize the state responsibility for providing a healthy environment with equal accessibility to healthy food.

Folic acid supplements for women of the age of fertility have been only partially successful, but will continue to be important even when folic acid fortification of flour is implemented. Vitamin and mineral supplements for the middle aged and elderly are not yet practiced uniformly and remain in the realm of individual practice, but may become a future issue with increasing knowledge and awareness of micronutrient importance and relative deficiencies among sectors of even relatively wealthy societies. Recent recommendations for supplements of vitamin D up to the age of adolescence will also need to be considered in the future.

In Israel there is a wide use of sophisticated and non-sophisticated marketing techniques. As in any place in the world, the industry recognizes that good marketing techniques lead to greater consumption of products, greater profit and frequently, over consumption. Children, deluged with marketing messages targeted especially to them are misled. Mass marketing by the food companies dilutes the effect of health promoting messages. The MOH and others who are engaged in health education cannot compete with the budget used by the industry for marketing. Thus, legislation has to be called into this cycle and make its effect to restrain unethical advertising especially directed at children.

As in many other countries, in Israel, unhealthy food items are cheaper than healthier foods. Thus, the poor get the worst of choices. Healthy diet is not accessible for them and thus education and labeling cannot suffice. In fact, the poorest member

“These findings are similar to those from the United States two decades ago. Needless to remind us that the current US rates of overweight and obesity among adolescents of 46% should mobilize us to act today with prevention programs to stop overweight and obesity.”
of societies is actually encouraged to make unhealthy choices because the least healthy choices are the only ones they can afford. In the current global environment, taxation and pricing (“price control”) are tools to increase the accessibility of people from low socioeconomic status to a healthier diet. This should be better utilized in Israel. It is worth supporting the link between agricultural policy, including subsidy programs, to the health of our pop-
ulation. A gradual and well coordinated change can have a minimal negative impact on the farmers and economics while making a substanti-
tive effect on health. These changes can change the preferences of farm-
ers and hence, promote health even better.

With regard to micronutrient defi-
ciences, legislation is nearly com-
pleted to ensure iodization of all salt used in the home and in food pro-
duction as well as fortification of 3% milk with vitamin D and the forti-
cation of flour with iron and B vita-
mins including folate and vitamin B12. The new regulations should come into effect in late 2005 or early 2006. Other nutrition related policies of the Ministry of Health are directed to alleviate food poverty, tailor diets for different sectors of the population and to promote an environment that encourages healthy diets and life styles.

It is clear that these plans will not work without strategic alliances and partnerships with the food indus-
try, agriculture and NGOs (as in the school lunch programs). The key ele-
ments, as stated above, are increased accessibility to a healthy diet with education. Continual efforts are being made to promote nutritional knowledge at different levels such as encouraging breast feeding, school-based interventions for nutrition and exercise and constructing appropriate dietary guidelines. Israel’s public health nutrition policy will continue with promotion of appropriate food fortification, supplementation, food security issues, monitoring along with the 5 “E’s” – education, employ-
ment, empowerment (especially for women), and enabling environment and exercise.

References

The concept of food security – a condition where all people in a population have, at all times, the physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs and preferences for an active and healthy life—has emerged as a critical concern for populations affected by armed conflicts.

Food security involves not only the physiological needs of the population, but also how the population balances other needs required for life and living. Food insecure populations are at risk for malnutrition and micronutrient deficiencies. Children, especially infants and preschool age children are the most sensitive to changes in food security since they require adequate nutrition during this period of rapid growth and critical physical and cognitive developments.

Most importantly, access to food and health is a basic human right enshrined in international human rights and humanitarian law to which occupying powers have the responsibility to protect. The fact that food security is even an issue in a place like the West Bank and Gaza Strip where food is plentiful in the marketplace and recent rainfall has been adequate, attests to the inevitable effects of conflict on the local economy and thus the population’s ability to access food.

This article aims to present the current nutritional status of the Palestinian population and serves as a call for action.

What’s the Status?

In 2002, under-nutrition and malnutrition reached alarming proportions. The deteriorating economy and reduction in marketplace (for food) and the workplace (for income) were strong contributors. By 2003, global chronic malnutrition (indicating long-term inadequate nutritional intake leading to stunting) among children 6 to 59 months of age was 12.7% in the Gaza Strip and 9.2% in the West Bank.

Under normal circumstances, the agricultural production in Palestine could contribute significantly to a nutritious diet for its population. However, fluctuations in actual farm land productivity, combined with limited financial and other resources to support agricultural production, have contributed to problematic outcomes. Much of the Palestinian population is either under-nourished or vulnerable to insufficient nutritional intake, and depends on food aid which also has not always been adequate due to donor fatigue, lack of resources and reduced import of food items including food aid packets for food assistance. Nonetheless, humanitarian assistance provided to Palestine in response to findings of severe levels of acute and chronic malnutrition in 2002 likely contributed to slight improvements in the nutritional situation. However, since the Palestinian population in the West Bank and Gaza Strip continues to grow, the demand for food increases. Availability of food, in general, has declined since the
inception of the second Intifada in September 2000.

**Sources of Energy**
Results of a series of Palestinian Central Bureau of Statistics (PCBS) household surveys indicate that between 1996 and 1998 Palestinians consumed an average of 2,114 kilocalories, a level of daily food energy consumption considered sufficient for individuals engaged in light physical activity. The Food and Agricultural Organization of the United Nations (FAO) reports that breads and cereal products were the primary source of food energy, representing 49% of the calories consumed, followed by oils and fats (13.3%), and sugars and other sweeteners (13.1%). Protein consumption was at an estimated level of 56.3 g, representing about 10% of the total daily dietary intake. While access to food was relatively secure during the 1996-1998 period, unequal distribution of the available food did create some food insecurities among pockets of vulnerable people, located particularly in Gaza, Jenin and Nablus.

Two studies conducted in 2000 and 2002 provide insights into changes in the nutritional intake since the 1996-1998 period and during the first two years of the Intifada. The First Palestinian National Health and Nutrition Study was conducted in 2000 and the Nutritional Assessment of the West Bank and Gaza Strip was conducted in 2002. Comparisons of data between the two studies indicate marked declines in protein, carbohydrate and fat intake among women of reproductive age. Given that carbohydrates and fats constituted 49% of the calories consumed in 1996-1998, and represent relatively inexpensive sources of calories, it is likely that energy consumption, as represented by kilocalories, also declined.

**Trends in Food Supplies**
In general, Palestinian communities have traditionally enjoyed relatively rich agricultural produce and successful husbandry of meat and dairy animals, along with coastal fishing in Gaza. The current situation, has introduced constraints to availability and access to food per capita. Food production has declined 2.9% since the institution of closures and curfews. Real per capita incomes have dropped 46% since 1999 prompting households to cut consumption spending. Food prices have increased, with some fluctuations, since the beginning of the Intifada in September 2000 (Table 1).

**Table 1. Change in Annual Food Price Indices, 1998 to 2003**

<table>
<thead>
<tr>
<th>Marketing Year</th>
<th>Food Price Index</th>
<th>% Change (per year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998-1999</td>
<td>119.67</td>
<td>8.80</td>
</tr>
<tr>
<td>1999-2000</td>
<td>121.30</td>
<td>1.38</td>
</tr>
<tr>
<td>2000-2001</td>
<td>120.50</td>
<td>-0.66</td>
</tr>
<tr>
<td>2001-2002</td>
<td>122.79</td>
<td>1.90</td>
</tr>
<tr>
<td>2002-2003</td>
<td>128.08</td>
<td>4.31</td>
</tr>
</tbody>
</table>

Source: FAO Report

Production is just one source of food in Palestine. Imports from Israel and other countries contribute to the available food supply (FAO
By 2003, a similar survey indicated that 25% of households placed food at the top of their list of assistance needs, followed by jobs and money.

**What about the Children?**

Food consumption including intake of key macro and micronutrients has declined since 2000. Median energy (kilocalorie) intake among children 1-5 years of age, inclusive, has declined (Figure 1).

By 2002, the population indicated alarming levels of global acute malnutrition (GAM – short-term acute inadequacies of nutritional intake leading to wasting) and global chronic malnutrition (GCM – longer term inadequate nutritional intake leading to growth retardation and potential negative developmental consequences). A repeat assessment conducted in 2003 indicated some improvements, as shown in Table 3.

Nonetheless, a large portion of the population of Palestinians under the age of 5 is vulnerable to varying degrees to nutritional deficiencies and their consequences. The global acute malnutrition prevalence by district is depicted in Figure 2 for rate of wasting.

**Anthropometric Data**

The 2003 FSANS assessment indicates alarming levels of micronutrient deficiencies in children less than 5 years of age, using an intake of < 80% of the US Recommended Daily Allowances (RDAs) for each macro or micronutrient as the cut off for...
nutritional deficiency as shown in Table 4.

- Among 1-3 year old children there was an 8.3% decline in median daily energy intake and 13.2% for 4-5 year old children. Trends in Gaza are of particular concern, since the decrease in energy intake among 4-5 year old children reached 19.2%.
- In stark contrast to 2002, and to any other normally nourished society, older children in the 2003 sample were consuming on average fewer calories than the younger children. This drop in daily calorie intake as children age is a marker for increasing food insecurity.

<table>
<thead>
<tr>
<th>Micronutrient Deficiency</th>
<th>West Bank</th>
<th>Gaza</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protein</td>
<td>1.5</td>
<td>12.7</td>
</tr>
<tr>
<td>Vitamin A</td>
<td>24.1</td>
<td>79.5</td>
</tr>
<tr>
<td>Vitamin E</td>
<td>15.7</td>
<td>41.5</td>
</tr>
<tr>
<td>Folate</td>
<td>15.6</td>
<td>53.9</td>
</tr>
<tr>
<td>Iron</td>
<td>25.4</td>
<td>89.7</td>
</tr>
<tr>
<td>Zinc</td>
<td>95.0</td>
<td>95.2</td>
</tr>
</tbody>
</table>

The Prospect of a Response

Stakeholders—donors, national and international NGOs, and research institutions—should work within the framework of the Palestinian National Nutritional Strategy developed in 2003 by the Palestinian Ministry of Health (MOH) for focused interventions. Likewise, the MOH should take the lead in coordinating donors and NGOs in all areas, including gathering and monitoring data that guides interventions. Aside from operations, the MOH can oversee the delicate task of ensuring macro and micronutrient deficiencies are adequately addressed.

Prevention: Malnutrition and Food Consumption

The role of the MOH is to ensure the standardization of nutritional indicators and the protocols for nutritional deficiency management across all providers. UNRWA clinics currently measure weight for age. MOH clinics measure weight for height. NGOs may use a combination. How cases of acute and chronic malnutrition should be identified, treated, and referred across the spectrum of health providers and facilities require a uniform approach. A well publicized strategy that includes donors, NGOs and local health providers and that ensures continuity of nutritional care between antenatal, postnatal, sick children and primary care clinics, as well as social services would address the frequently missed cases of undernutrition. Further, a means of clinic-based nutritional monitoring needs to occur beyond that which occurs at routine clinic visits (anthropometric measurements usually take place at the time of immunization which for most children is rarely beyond 15 months of age). Children in the 3-5 year age range are at risk of macro and micronutrient deficiencies—this group is not captured well either for surveillance or intervention since they are less likely to be presenting to clinics for routine primary care.

Much has been discussed regarding nutritional surveillance and a sentinel mechanism as a part of an early warning system for acute malnutrition and for monitoring malnutrition—yet nothing to date has been organized. Either a household or clinic-based approach would be beneficial, although the latter is more feasible and easier to establish. A network of UNRWA, MOH, and NGO clinics in each district and in critical access areas (villages at risk from the separation barrier, villages surrounded by settlements, zones of high poverty) could be easily identified and a database developed. Monthly nutritional input could be collated and sent to the two Health Information Centers in Nablus and Gaza City, analyzed, interpreted, and disseminated to key stakeholders. Anthropometric data serve as indicators of household food security and add to FAO’s Food Security and Vulnerability Information and Mapping System proposed for the Palestinian Territories.

The relatively easy reversible nature of acute malnutrition makes a preventive approach more preferable. This assessment would argue that in addition to anthropometric monitoring,
periodic 24-hour energy assessments should be followed to monitor medi-an daily kilocalorie intake of vulnerable groups over time. In the face of ongoing deterioration in the Palestinian economy and the increasing level of household food insecurity, further decline in the nutritional status of young children is inevitable.

**Interventions: Malnutrition and Food Consumption**

Before implementing specific interventions, monitoring mechanisms should ideally be in place in order to evaluate their effectiveness and cost-benefits sufficiently, but they should not delay the opportunity for action. Interventions should be evidence-based, where possible. For instance, population-based strategies such as fortification of common foods, which though cost-effective, require significant start-up costs, should thus be supported by population studies that demonstrate its effectiveness. For example, no population-based study to date has examined the benefit of iron fortification of flour in a Middle Eastern population.

A variety of food interventions are already in varying stages of development and implementation. Fortification remains the most likely effective population-based approach since the population is eating below RDA levels for all micronutrients. Past experience with the 24-hour recall method has demonstrated that the diet has little day-to-day variability thus making the fortification intervention easier to monitor. Wheat flour and oil remain the most viable candidates as fortification vehicles. Iron, B-complex vitamins, and folate can be added to flour and vitamin A to oil. Cereals, juices, milk, and margarine are expensive for most households to purchase and for that reason less useful as fortification vehicles.

Fortification and supplementation strategies, although cost-effective in the long-term compared to the ultimate cost to society, do require what some donor agencies and NGOs may feel are prohibitive start-up costs. Such organizations may be less inclined to embark on such ambitious interventions. Fortification in particular, has high start-up costs and requires ongoing quality assurance. Ideally, foods can be fortified in-country rather than imported and it is particularly in this area that technical expertise from the Israeli Ministry of Health and the World Health Organization’s Eastern Mediterranean Office could be supportive.

“A number of households have restricted purchase and consumption of animal proteins, restricted or abandoned fruits from their diets and are relying on less expensive foods including breads, potatoes, lentils and seasonal vegetables.”

**Lifting the Threat**

Access to nutritional food for the Palestinian population, that mitigates the risks of acute malnutrition as well as macro and micronutrient deficiencies, requires immediate attention and priority. There is an urgent need for international investment to fund practical, ‘on the ground’ programs in the West Bank and Gaza to ensure food security and alleviation and prevention of nutrient deficiencies especially under jeopardy by armed conflict.

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**State of Nutrition Document in oPt**

The Palestinian Ministry of Health (MOH) with technical support from the WHO, UNICEF and other stakeholders developed a review based on available nutrition information in the occupied Palestinian territories (oPt) from the past ten years. The key findings were presented during a workshop in Ramallah (March 20-22, 2005).

- Iron-deficiency anaemia is the major nutritional problem in oPt, and vitamin A deficiency and rickets in Gaza are micronutrient deficiencies of concern.
- Wasting in young children remains an insignificant problem.
- Stunting levels among the under-five children appear to be increasing.
- Studies vary in their findings of the influence of the Intifada on rates of malnutrition among children.
- Vitamin A and D and iron supplementation of school-age children are in place. The effectiveness and coverage of these programs requires closer examination in view of the high levels of anaemia, vitamin A deficiency and possibly rickets. There is also a need for harmonization of related protocols and guidelines.
- A major gap in programming is the absence of a national nutrition surveillance system.
- A massive food aid operation was launched after 2000 which is viewed as having been instrumental in addressing food insecurity at household level and thus preventing and lowering levels of malnutrition. There is no documented evidence, however, that food aid has had any impact on nutritional status.

**Bibliography**


Micronutrient malnutrition has been a subject of concern for many years. A joint Israeli-Palestinian conference on micronutrient conditions (Jerusalem, 2000) was followed by a joint workshop of the Academies of Science of the United States, Israel, the Palestinian Authority (PA) and Jordan (August, 2000). A recent conference on child nutrition and prevention of micronutrient deficiencies was sponsored by Tufts University (USA), Al Quds and Ben-Gurion Universities (February 2005), with various studies showing nutritional deficiencies in the Israeli and Palestinian populations. A follow-up of the Academies conference is planned for May 2005 to recommend governmental and non-governmental interventions, specifically fortification of basic foods and supplementations for specific population groups at special risk.

The public health interventions needed are clear and based on local findings and world experience. We call on the government of Israel and the Palestinian Authority to proceed immediately with the longstanding recommendations of food fortification as well as mineral and vitamin supplements for vulnerable groups in our two populations. Palestinians eat food manufactured in Israel and improved health and well being of both population groups is of strong mutual interest.

Below are our joint recommendations for the improvement and prevention of micronutrient deficiencies in Palestine and Israel.

1. The Palestinian Ministry of Health (PA MOH) and relevant NGOs should work together to promote National Nutrition Programs based on region- and international standards.

2. Micronutrient supplements should be provided free of charge, on a routine and continuous prophylactic basis, to ALL persons in the following groups:
   a. All infants and toddlers up to age 2, including vitamins A, C, D, and iron;
   b. Vitamin D supplements should be given to all children from aged one month to the end of adolescence;
   c. Women of fertility age should receive multi-vitamins (with iron, vitamin B complex, folic acid and vitamin C) especially during pregnancy and breast feeding;
   d. Primary health care programs operated by all health providers (the Israeli and PA Ministries of Health, UNRWA and NGOs) should adopt similar standards and programs of micronutrient prevention; and
   e. Failure to Thrive (FTT) centers should be established within existing health services (PA, UNWRA, NGOs) providing primary care to the West Bank and Gaza areas, with a common program of education, supplementation and daytime feeding support for referred cases of FTT.

3. Fortification of basic food products should be required on food products including:
   a. All flour should be fortified with iron, folic acid and vitamin B complex;
   b. All milk products should be fortified with vitamins A and D;
   c. All salt used in households, food preparation and in food industries including animal husbandry should be fortified with iodine; and
   d. The MOH of the PA and the Israeli MOH should cooperate with other relevant ministries to ensure that manufacturers of flour, milk products and salt produced in Israel, or imported and sold in Israel and the PA are fortified and monitored;

4. Monitoring of nutrition status should be carried out annually including:
   a. Anthropometric studies;
   b. Studies of iron deficiency anemia should be carried out annually;
   c. Studies should be carried out of urinary iodine levels;
   d. Studies of vitamin D levels;
   e. Reference laboratories should be developed and personnel trained; and
   f. Cooperation between academic centers and ministries of health should be maintained

5. Educational activities in nutrition should be developed and carried out in conjunction with international aid agencies for the general public, health care providers, food manufacturers and others.

6. A Joint Israeli-Palestinian Nutrition Working Group (IPNWG) should be established as an advisory body, reporting regularly to the PA and Israeli Ministries of Health, interested NGOs and the general public.
More than 30 years ago, when you served as the Canadian Minister of Health and Welfare, the term “health promotion” was introduced in the influential report, “A New Perspective on the Health of Canadians”. What were the original inspirations for introducing this concept into health policy?

The concept of health promotion had been in existence long before this report was published in 1974. The perspectives of health in the report were based on the WHO’s broad definition and holistic approach to health. The concept of health promotion had been around but hadn’t been developed from a policy approach.

Increasing health insurance costs in Canada was a serious public health concern for Canadian citizens as well as the government. The natural reaction was to try and cut costs. We took a broad approach and examined the entire concept of health. Interestingly, the group that worked on this analysis in the health department was not solely made up of traditional health workers. We were a combination of sociologists, medical doctors and myself, a lawyer, interested in public policy issues. This mix of expertise made the process quite interesting and largely affected the outcome of our analysis. We were able to look at a very broad context of health and that’s how we came up with the basic concept that health had to be defined by biology, environment, lifestyle and health services. Although health services are represented in more than 90% of the expenses in the field of health, we realized, that if we looked at the causes of mortality and morbidity, a good number of those causes, would be effectively affected by addressing measures that had to do with tackling methods of prevention like lifestyle and environment and more than just health care and treatment.

Why do you think Canada succeeded so well in introducing health promotion and what were some of the challenges along the way?

We involved the different sectors of government who never thought their programs were health programs and we involved them so that they felt that improving health was in their hands. At first, health promotion had more impact abroad than at home until public health officials and activists started attending international conferences and meetings. It was a boomerang effect, in which the concepts of health promotion policy which were introduced in Canada, bounced back to Canada from abroad.

It was finally successful due to a combination of the persistent pursuit of a broad health policy over 20 years and the support of public health organizations in the field as well as the adoption of health promotion by former United States Secretary of Health Education and Welfare, Joseph Califano who mounted major health promotion and disease prevention programs and the adoption of health promotion by Simone Veil, the former French Minister of Health, Urban and Social Affairs.

It was not easy. Take wearing seat belts, for example. It was agreed across the board at the national level that this should be done. We issued a press release that we support the mandatory wearing of seat belt. When we got back home, we received heated criticism at the provincial and local level who felt that this was a private matter and that government had no business in citizens’ cars. The Canadian provinces of Alberta and Nova Scotia resisted passing such legislation. Finally, when the impact of seat belt wearing was made evident in other provinces and politicians became more educated, those resist-
have a good chance in life is mutual. Developing public health policies that could help children should be able to relieve negative relations and should help develop communal support and initiatives in education, immunization, feeding and proper nutrition for the children. It’s hard to imagine that people would refuse to work together in that regard.

Marc Lalonde was Canadian Minister of Health & Welfare from 1972-1977. He received international notoriety as the co-author of “A New Perspective on the Health of Canadians”. In 1988, Mr. Lalonde received the WHO Medal for his contribution to health policy, and in 2002, he was selected by the PAHO as one of eleven Public Health Heroes who have shaped the past 100 years of international public health. Currently, he is practicing law in Canada.
The health of mothers and children is a priority that emerged long before the 1990s— it builds on a century of programs, activities and experience. What is new in the last decade, however, is the global focus of the Millennium Development Goals (MDGs) and their insistence on tracking progress in every part of the world. Moreover, the nature of the priority status of maternal and child health (MCH) has changed over time from a technical concern into a moral and political imperative.

The World Health Report 2005 identifies exclusion as a key feature of inequity as well as a key constraint to progress. Taking stock of the erratic progress to date, the report sets out the strategies required for the accelerated improvements that are known to be possible. It is necessary to refocus the technical strategies developed within maternal and child health programs, and also to put more emphasis on the importance of the often overlooked health problems of newborns. In this regard, the report advocates the repositioning of MCH as MNCH (maternal, newborn and child health).

**Patchy Progress and Widening Gaps – What Went Wrong?**

Although an increasing number of countries have succeeded in improving the health and well-being of mothers, babies and children in recent years, the countries that started off with the highest burdens of mortality and ill-health made least progress during the 1990s. In some countries the situation has actually worsened, and worrying reversals in newborn, child and maternal mortality have taken place. Progress has slowed down and is increasingly uneven within countries.

Countries where health indicators for mothers, newborns and children have stagnated or reversed have often been unable to invest sufficiently in health systems. The health districts have had difficulties in organizing access to effective care for women and children. Humanitarian crises, pervasive poverty, and the HIV/AIDS epidemic have all compounded the effect of economic downturns and the health workforce crisis. With widespread exclusion from care and growing inequalities, progress calls for massively strengthened health systems.

**Making the Right Technical and Strategic Choices**

There is no doubt that the technical knowledge exists to respond to many, if not most, of the critical health problems and hazards that affect the health and survival of mothers, newborns and children. Antenatal care is a major success story; demand has increased and continues to increase in most parts of the world. However, more can be made by emphasizing effective interventions and by using it as a platform for other health programs such as HIV/AIDS and the prevention and treatment of sexually transmitted infections, tuberculosis and malaria initiatives, family planning, preparing for birthing and parenting. Pregnant women, adolescents in particular, may be exposed to violence, discrimination in the workplace or at school, or marginalization. Such problems also need to be dealt with. And, there remains a large unmet need for contraception, as well as for more and better information and education, as well as a need to facilitate access to responsive post-abortion care of high quality and to safe abortion services to the fullest extent allowed by law.

Women risk death to give life, but with skilled and responsive care, at and after birth, nearly all fatal outcomes and disabling sequelae can be averted. Every woman needs skilled care when giving birth, in an appropriate environment that is close to where she lives and respects her birthing culture. Such care can best be provided by a registered midwife or a health worker with midwifery skills, in decentralized, first-level health facilities. All women need first-level maternal care while back-up care is only necessary for a minority, but to be effective both levels need to work in tandem and both must be put in place simultaneously.

There is an urgent need to develop effective ways of organizing continuity of care during the first weeks after birth, when health service responsibilities are often ill-defined or ambiguous. The postpartum gap in providing care for women is also a postnatal gap. Although the picture of the unmet need in caring for newborns is still very incomplete, it shows that the health problems of newborns have been unduly neglected and underestimated. Newborn mortality is a sizeable proportion of the mortality of children under five years of age.

The greatest risks to life are in its
beginning, but they do not disappear as the newborn grows into an infant and a young child. The Integrated Management of Childhood Illness (IMCI) combines a set of effective interventions for preventing death and for improving healthy growth and development. IMCI has transformed the way the health system looks at child care – going beyond the mere treatment of illness. IMCI has three components: improving the skills of health workers to treat diseases and to counsel families, strengthening the health system’s support, and helping households and communities to bring up their children healthily and deal with ill-health when it occurs. IMCI is bringing health care closer to the home, while at the same time improving referral links and hospital.

**Moving towards Universal Coverage**

There is a strong consensus that, even if all the right technical choices are made, maternal, newborn and child health programs will only be effective if together, and with households and communities, they establish a continuum of care, from pregnancy through childbirth into childhood. This continuity requires greatly strengthened health systems with maternal, newborn and child health care at the core of their development strategies.

Putting in place the health work-force needed for scaling up maternal, newborn and child health services towards universal access is the first and most pressing task. The extra work required for scaling up child care activities requires the equivalent of 100,000 full-time multipurpose professionals, supplemented, according to the scenarios that have been valued, by 4.6 million community health workers. Projected staffing requirements for extending coverage of maternal and newborn care assumes the production in the coming 10 years of at least 334,000 additional midwives – or their equivalents – as well as the upgrading of 140,000 health professionals who are currently providing first-level maternal care and of 27,000 doctors who currently do not have the competencies to provide back-up care.

In many countries, salary levels are rightfully considered unfair and insufficient to provide for daily living costs, let alone to live up to the expectations of health professionals. This situation is one of the root causes of lack of motivation, lack of productivity and the various forms of brain-drain and migration: rural to urban, public to private and from poorer to richer countries.

At the same time, ensuring universal access is not merely a question of increasing the supply of services and paying health care providers. For services to be taken up, financial barriers to access have to be eliminated and users given predictable financial protection against the costs of seeking care, and particularly against the catastrophic payments that can push households into poverty. To attain the financial protection that has to go with universal access, countries throughout the world have to move away from user charges, be they official or under-the-counter, and generalize prepayment and pooling schemes. On any given scheme two things are important. First, that ultimately no population groups are excluded. Second, that maternal and child health services are at the core of the health entitlements of the population, and that they be financed in a coherent way through the selected system.

Financing is the main need underlying the planning of maternal, newborn and child health care. First, increased funding is required to pay for building up the supply of services towards universal access. Second, financial protection systems have to be built at the same time as access improves. Third, the channeling of increased funds, both domestic and international, has to guarantee the flexibility and predictability that make it possible to cope with the principal health system constraints – particularly the problems facing the workforce.

While the financing effort seems to be within reasonable reach in some countries, in many it will go beyond what can be borne by governments alone. Both countries and the international community will need to show a sustained political commitment to mobilize and redirect the considerable resources that are required, to build the institutional capacity to manage them, and to ensure that maternal, newborn and child health remains at the core of these efforts. This decade can be one of accelerating the move towards universal coverage, with access for all and financial protection. That will ensure that no mother, no newborn, and no child in need remain unattended – because every mother and every child counts.
Good nutrition is a basic requirement for having a healthy, productive life and is mainly based on a balanced and diverse diet. However, these requirements are frequently not satisfied both in developed as well as in developing countries because of a variety of factors, including dietary restrictions associated with lifestyle or aging and because of cultural, religious, political or economic reasons. The human diet is typically highly based on sugar, vegetable oils and fats and starchy foods, which provide energy but are very poor sources of essential vitamins and minerals. As a consequence, human beings continue suffering from micronutrient deficiencies and their ill effects, which are mostly sub-clinical. Rich and poor societies are at risk of suffering from anemia, rickets, osteoporosis, anomalous growth and development, suboptimal mental and physical performance and impaired response to disease and infections. The situation is worse in poorer societies where access to nutrient-dense foods, such as milk, eggs and meat, is limited, as is the case for Palestinian communities under the current circumstances.

During the last century, many countries have raised awareness of and even implemented ways to improve the nutritional quality of some foods by means of the addition of essential micronutrients. Thus, solid vegetable fats such as margarine are made nutritionally equivalent to butter by the incorporation of vitamin A and D. Vitamin C is added to fruit juices to enrich its natural content of this vitamin. Salt has become a source of iodine due to fortification with this mineral, which is not naturally present in salt.

Why Wheat Flour?
Wheat flour has properties that make it an ideal vehicle to supply many other micronutrients in a safe and effective way. Wheat flour is usually produced in a few and centralized factories; it is consumed very frequently and in substantial amounts (greater than 100 g/day); vitamins are reasonably conserved during bread preparation; and the cost is affordable (less than
US$0.003/kg or less than 1% of the consumer price. No other food has those characteristics. Furthermore, the chemical industry has produced suitable forms of iron, folic acid and vitamins A, D, and B-12 for flour fortification while maintaining the requirements of kashrut and halal.

Similarly, the nutritional value of whole wheat grain is commonly restored in the refined white flour by the addition of vitamins B-1, B-2 and niacin. Prevention of beriberi, arboflavinosis and pellagra in the United States, during the 1940s is attributable to the implementation of flour enrichment according to federal standards. Chile has practically eliminated iron deficiency anemia due to enrichment of wheat flour with iron using ferrous sulfate. Recently, Chile, the United States and Canada have demonstrated that the incidence of neural tube defects in newborns is drastically reduced if women consume flour enriched with folic acid.

**Steps towards Flour Fortification**

The Palestinian Authority, with technical and financial assistance from USAID, has begun implementing wheat flour enrichment and fortification to increase the supply of basic nutrients for Palestinian communities. The formulation has been designed to prevent any unnecessary excess intake of folic acid, iron, zinc, and vitamins A and D for persons whose flour consumption is nearly 400 g/day. The formulation would supply 40-100% of the daily nutritional requirements of those nutrients plus vitamins B-1, B-2, B-6, B-12 and niacin to persons with the usual flour consumption of 200-400 g/day. Once fortification is implemented, it is expected that more than 80% of the flour in Gaza and 60% of the West Bank would be fortified accordingly to this formulation. The remaining 40% of the West Bank demand of flour is satisfied by importation, mainly from Israeli mills.

Independently, some bakeries in Israel have already started enrichment of bread dough with iron, and vitamins B-1, B-2, niacin and folic acid, and fortification with vitamin B-12. It would be easier and more cost-effective to fortify the flour instead of the dough.

**A Formulation Fit for Israelis and Palestinians**

Although current nutritional needs are different for Israelis and Palestinians, the formulation accepted by the Palestinian Authority is safe for both communities and with minor adjustments could be made equally effective. Wheat flour consumption per capita in Israel is approximately half than that in Palestine, which would lead to a supply of micronutrients through fortified flour of approximately 0-50% of the daily nutritional requirements.

However, the diet of most Israeli communities is better than the Palestinian diet and these nutrient amounts would complement it well. Perhaps most Israelis would not need to receive vitamin A and D through fortified flour, but vitamin D deficiencies have been shown in some population groups in Israel and the amounts are low enough to ensure safe intakes of these two vitamins for the general population. In the Palestinian formulation, the minimum level of folic acid is 1 mg/kg (approximate average of 1.5 mg/kg), which means that the additional intake of this nutrient through the consumption of 100-200 g/day of fortified flour is approximately 100 to 300 micrograms a day.

**Adjusting to Meet Our Needs**

Experience in the United States and Canada has shown that additional daily intake of 200 micrograms of folic acid is effective to reduce incidence of neural tube defects, and this level of folic acid may be adequate in Israel. In the Palestinian formulation, the minimum level of vitamin B-12 is 0.0025 mg/kg (approximate average of 0.0030 mg/kg), which means that the daily additional intake is 0.25 to 0.6 micrograms when flour consumption is between 100 and 200 g/day. This amount might be low in the case of Israel and would probably need to be doubled. This change can be made in the Palestinian formulation; it would increase the cost of fortification by US$0.15/metric ton or 6% of the current cost, but this is highly feasible. Calcium has not been integrated in the Palestinian formulation because of the need to have a local supplier of affordable calcium. If Israeli authorities decide to favor the acquisition of calcium to be used in wheat flour enrichment, it would also benefit the Palestinian consumers.

In summary, wheat flour enrichment and fortification is a good initiative that would favor health promotion of Israeli and Palestinian communities, and may also become a common subject of mutual need, dialogue, compromise and understanding between them.

**Dr. Omar Dary** was born in Guatemala to a Palestinian father. He works in the International Science and Technology Institute (ISTI) as the food fortification advisor for MOST, the USAID micronutrient program. He has served as an expert consultant in food fortification and micronutrients for WHO, UNICEF, the Pan American Health Organization, GAIN, the Micronutrient Initiative (MI), and the CDC in the United States.

**Bibliography:**


How to... Wheat Flour Enrichment and Fortification:

To address the high prevalence of anemia and micronutrient deficiencies among children, especially in the Palestinian population, the feeding of fortified wheat flour has been considered as a viable solution. The objective of fortifying wheat flour is to ensure adequate intake of essential nutrients, particularly iron and vitamin A.

The fortification process involves adding selected vitamins and minerals to wheat flour to meet the recommended daily allowances. The fortification additives include:

- Vitamin A (retinol palmitate)
- Iron (ferrous sulfate)
- Thiamine (thiamin hydrochloride)
- Riboflavin (riboflavin)
- Niacin (nicotinic acid)
- Folic acid

These nutrients are added at specific levels to ensure balanced nutrition and prevent deficiencies.

The fortification process is monitored by various international organizations, including UNICEF and the World Health Organization (WHO), to ensure the quality and safety of the fortified wheat flour.

Enriched wheat flour is typically consumed in bread and flatbreads. The fortified flour provides a cost-effective and culturally acceptable way to improve nutritional status, particularly among vulnerable populations.

The benefits of fortifying wheat flour include:

- Increased intake of vitamins and minerals
- Improved immune function
- Enhanced cognitive development in children
- Reduced incidence of anemia

The primary challenge is ensuring the nutritional impact of fortified flour is sustained over time. This requires robust monitoring and evaluation mechanisms.

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International Science and Technology Institute.

Riad Dar-Malouleh, sanitation engineer, and Nahla Harb, head of the nutrition and food hygiene department at the Ministry of Health, are leading the initiative on fortified flour in Jordan.

Exploring options to improve flour nutrition and explore the potential of fortified flour for improving child nutrition in Jordan.

Jordan.

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Riad Dar-Malouleh, sanitation engineer, and Nahla Harb, head of the nutrition and food hygiene department at the Ministry of Health, are leading the initiative on fortified flour in Jordan.

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Jordan.
Serving Mutual Needs: Wheat Flour Enrichment and Fortification

photos: Ilya Melnikov
استمرار (استهلاك اليومي أكثر من 1000 غم). وخلال تضحيات الخبز، فإن الفيتامينات التي تحبي المحلاط الحنفيات يمكنك تحفيزها بشكل معقول. بالإضافة إلى أن تزويج الطحين بالفيتامينات والمعادن يcripts الكمية (أقل من 1/2 من سعر المستحيل أو أقل من 1/2000 دولار لكل كيلو غرام) ولا يوجد طعام آخر يشارك في ذلك. هذه الطبخات يمكن أن تتوافق مع المحافظة على احترام التقاليد الدينية عند المسلمين واليهود.

لا يُمكن منشأ نظام على القيمة الغذائية الكامنة للخبز بعد أن يتم enrichment. B1، B2، و B6، B12، folic acid، و viatamins A، D، E، C وغيرها من المعادن السائلة. "I" abandonment. If you refine the flour in a way that beneficiate the contaminants in the flour. And it's not just flour - it's the whole system that needs to be adjusted. A teaching moment: D. عمرداري

**تحديثات مشتركة**

**خطوات نحو تعزيز الطحين**

- **التحديثات الفيتيون في أطعمة من A، D، B1، B2، B6، B12، و folic acid**
- **التزويد بالفيتامينات والمعادن للطحين بالخبز**
- **النظام الغذائي» (IIST) للحصول على أفضل النتائج**
- **الإشراف على النظام الغذائي» (MOH) للأطباء الذين يضيفون الفيتامينات والمعادن للطحين بالخبز**
- **ال треть الطحين من خلال التغذية الذاتية**

**حاجات مشتركة**

- **استخدام الفيتامينات والمعادن للطحين بالخبز**
- **النظام الغذائي» (IIST) للحصول على أفضل النتائج**
- **الإشراف على النظام الغذائي» (MOH) للأطباء الذين يضيفون الفيتامينات والمعادن للطحين بالخبز**
- **ال треть الطحين من خلال التغذية الذاتية**

**التركيبة الفيتيون في أطعمة من A، D، B1، B2، B6، B12، و folic acid**

- **الاستخدام الفيتيون في أطعمة من A، D، B1، B2، B6، B12، و folic acid**
- **الاستخدام الفيتيون في أطعمة من A، D، B1، B2، B6، B12، و folic acid**
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- **الاستخدام الفيتيون في أطعمة من A، D، B1، B2، B6، B12، و folic acid**
- **الاستخدام الفيتيون في أطعمة من A، D، B1، B2، B6، B12، و folic acid**
تعتبر الغذاء الجيدة ضرورة أساسية لتمتع بحياة صحيحة ومتناسقة. توفر الغذاء الجيدة تعتمد على نظام غذائي متوازن وصحي. ومع ذلك فإن هذه الضرورات لا تتحقق في البلاد المنتقدة أو النامية على حد سواء بسبب القيود الغذائية المرتبطة بالعمر أو لأسباب دينية، أو إقليمية أو سياسية أو اقتصادية.

يتمع الإنسان في خياله بشكل رئيسي على السكر والفاكهة والزبادي والدهون وكذلك الأطعمة النباتية والتي تعطي 영화 الإنباح في الطاقة، ولكنها تعتبر مصدر مفيد للفيتامينات الأساسية والعناصر.

نتيجة لذلك فإن الإنسان يعاني باستمرار من تأثيرات نقص في الفيتامينات والمعادن، فإن المجتمعات النامية وكذلك الفقراء معرضة

من خلال تزويدها بفيتامينات A,D، كما أن القيمة الغذائية للمحليين ونوع الدسم يزيد من خلال إضافة الفيتامينات التي يقددها الحليب عند إزالة الدهون منه. كما أن فيتامين C أصبح يضاف إلى عناصر الفواكه. لتغذية أطفال الطفولة.

كما أن السكر والفواكه والفاكهة والأطعمة القهوة يشكلون مصدرًا مهمًا للนอกات المحلية في المجتمعات الفلسطينية في الظروف الحالية.

لماذا طحن الفحم؟

يتم طحن الفحم بخصوص تقليل نسبة السكر وأملاح الفيتامينات وضمان لمعدات بطريقة آمنة وفعالة. ت凳م طحن الفحم عادةً في مصانع محدودة ومركدة، والتي تستخدم بكميات كبيرة ويشكل

تقوية وإثراء الطحين : لخدمة

يقلن: د. عمر داري

GPS: Ilya Melnikov
Helping Palestinian Children at Tel-Hashomer Hospital

For over a year, Jewish and Arab volunteers have been visiting the wards of Tel-Hashomer Children’s Hospital. Their aim is to help Palestinian families from Gaza and the West Bank whose children are hospitalized.

Because of the policy of “closures,” “encirclements” and the occupation in general, these families and their sick children are detached from their own environment. Sometimes children in grave condition arrive at the hospital only with a grandparent, because their parents were forbidden to enter Israel, or because they must look after other children at home. Many of them have no personal items, because of the difficulties involved in crossing the checkpoints. Sometimes women come to the hospital soon after giving birth, without a change of clothes, washing items or other hygienic materials. They sometimes arrive after hours on the roads, crossing through checkpoints, and with a newborn baby in serious condition.

The volunteers do their best to provide the children’s relatives with a helpful and listening ear, and help them cope by mediating with the bureaucracy. They visit those children who are alone, with no accompanying relatives. They bring the parents basic needs – food, diapers for the children, washing items, phone-cards to stay in contact with home, and so on.

None of the above is provided by the hospital, and without this help the parents must sometime live off their children’s left-over food, because of the high cost of living in Israel and the length of the children’s stay in hospital.

Since it began, the project has been self-funded in cooperation with Physicians for Human Rights - Israel.

For more information contact Shaula: 052-2936917 or Judith 052-2958886

International Master of Public Health

by Elliot Berry and Shulamit Amir

The International Master of Public Health Program (IMPH) at the Hebrew University-Hadassah Braun School of Public Health and Community Medicine welcomed its first class in 1970, building on the experiences acquired during the previous 10 years of teaching the Israeli MPH course.

The aim of the program is to provide public health knowledge, experience and skills for current and future public health practitioners, mainly from the developing regions of the world. The 12-month program includes compulsory core courses, elective courses selected by each student, workshops and an individual research project. Epidemiology, statistics, nutrition, administration, communicable diseases, economics and sociology are some of the core disciplines as well as an intensive workshop in Community Oriented Primary Care (COPC). Other courses include AIDS, aging, demography, maternal and child health, and public health dentistry.

The student body consists primarily of physicians (approximately 75%), nurses, dentists, educators and other health professionals. Over 550 students from more than 80 countries have participated in this unique experience, including 33 from Gaza and the West Bank and some from East Jerusalem. Ahlam Kastiro, a former student of the program from Palestine says, “The Palestinian population is considered a developing region in a transition state. Some are rich and the others are poor and public health is a new emerging field. Being in this program gave me a wide range of tools that I can use to detect, identify and solve problems facing a small region or even whole countries.”

“The program provided me not only with academic opportunities, but also the chance to form relationships with students from all over the world and most importantly, Palestinian students with whom I maintain contact with professionally and as close friends,” shares Shiri Ourian, former student of the program from Tel-Aviv.

The vision for a new Middle East includes building a bridge of cooperation in the field of public health. We hope to continue our commitment in establishing public health teaching and research in our region – for bacteria know no borders and water and sanitation are a problem for all.
Disability Is a Challenge, Not a Burden
Dissemination and Information Department – PRCS

The Palestine Red Crescent Society (PRCS) held a conference titled, “Disability Is a Challenge, Not a Burden”, from February 12 – 14, 2005 in the city of Al-Bireh. Representatives from forty-two organizations participated in the three day event comprising Palestinian ministries, local and international institutions including PAZ – Spain (Asamblea de Cooperacion por la Paz), the Spanish Red Cross, the Norwegian Red Cross and G.V.C – Italy (Italian Volunteer Group).

During the opening session, PRCS President, Younis Al Khatib, provided a historical perspective of the concept of disability in Palestine and the challenges of overcoming stereotypes. Furthermore, Al-Khatib stressed the significance of the role that the community must play to promote integration of those with special needs. He added that one of the PRCS’ priorities is providing rehabilitation services to the Palestinian people, particularly children, both in Palestine and the Diaspora, in order to boost their self-esteem and increase their independence.

Dr. Rihab Al Esawi, Ministry of Social Affairs, Dr. Jihad Zakarneh, Ministry of Education and Mr. Arsan Ibrahim, Chief of the National Central Committee for Rehabilitation, praised the PRCS for its role in addressing the needs of people with disability, and stressed the importance of working on their integration by giving them the opportunities to develop their abilities.

Additionally, Fayeq Hussein, PRCS Deputy General Director, gave a presentation titled, “Rehabilitation and Development”. In his speech, Rabah Jaber, Head of PRCS Rehabilitation Department, presented the achievements of the PRCS rehabilitation department during 2000 to 2004. He noted that the number of beneficiaries - including those with developmental delays, slow learners, mental retardation, cerebral palsy, physical disability, hearing impairments and deafness, and multi disabilities – from the PRCS rehabilitation services reached 87,174 people between 2000 – 2004.

Participants included people with disabilities, their parents and the PRCS rehabilitation staff, discussed different issues related to rehabilitation. At the conclusion of the conference participants presented their recommendations and working papers were submitted for ratification.

The Day after Disengagement

Physicians for Human Rights-Israel (PHR-Israel) released a new position paper which warns of the health consequences following disengagement unless a process of planning and coordination for the provision of external medical services to residents of the Gaza Strip begins immediately.

The position paper entitled, “The Day After”, states that Israel will still be required to allow Palestinian patients to receive life-saving treatment in Israel and abroad, even after disengagement, and explains the legal rationale. Also, Israel must rehabilitate the Palestinian health care system over the next decade, in order to raise the standards to at least those of Jordan.

Due to the limited facilities and services of the Palestinian health care system, residents of Gaza are forced to travel to the West Bank, East Jerusalem, Israel and abroad to receive certain life saving treatments and complex diagnosis. Some services are simply non-existent in Gaza, such as catheterization and cardiac surgery, burn treatment, pediatric cardiology, radiotherapy, and MRI facilities. PHR-Israel points out that no preparations are known to have been made to enable Palestinians needing to leave the Strip for medical treatment after disengagement. The position paper recommends that medical services continue to be purchased from various sources, while simultaneously improving the infrastructure of the medical system until it at least reaches the standard level of Jordan. This will most likely take about 10 years, at the cost of approximately $250 million a year.

Israel is asked to begin working immediately on a set of regulations which would enable the thousands of people who must leave Gaza each year for medical treatment to exit and receive the treatment outside of the Strip. Also, plans must be made for the rehabilitation of the Palestinian health care system. Israel’s responsibility for Palestinian patients does not end with disengagement.

For more information contact Maskit Bendel, author of the position paper, +972-54-7700477. The position paper is online at www.phr.org.il
“Micronutrient deficiencies are not only a health problem,” stated Dr. Osman Galal, active participant in the Child Nutrition Conference held this past February at Ben-Gurion University, Beer Sheva, Israel. Dr. Galal, Professor of Community Health Sciences in the School of Public Health at UCLA, USA, and Director of the School’s International Health Program is referring to the fact that micronutrient deficiencies and food security are complex issues which affect not only the health status of the population, but also the economic status and social development of a country.

The members of the two day conference held in Beer-Sheva under the auspices of Al-Quds University, Ben-Gurion University and Tufts University representing Palestine, Israel and the United States, respectively, aimed to identify ways in which joint initiatives could be made in order to collaboratively improve the nutrition status of children in both Israel and Palestine.

“The appropriate development of the child starts from the nutritional status of the mother at conception and the nutritional status of the child continues to be a primary cause of proper development until puberty,” explained Dr. Galal. “In recent years, we have expanded our attention from physical growth indicators to cognitive growth and its relationship to nutrition,” states Dr. Galal. And in fact, the conference held in Beer-Sheva presented nutritional summaries of both Israel and Palestine and highlighted both the physical and cognitive impacts issues of food security and MNDs have on our children which include complications in pregnancy, low birth weight and, in extreme cases, infant and maternal deaths as well as blindness in children, weak immune systems, low IQ and low intellectual functioning.

“We cannot ignore, that cognitive and physical impacts of nutrition will have a strong impact on productivity. The importance of productivity of the child and therefore of the community in the future has a direct impact on the economic development,” said Dr. Galal who began his observations in Egypt, where he was born.

The World Bank has estimated that iodine deficiency, in combination with vitamin A deficiency and iron deficiency may lower the economic wealth of a nation by as much as 5% every year. (1)

On the second day of the event, following the presentations of nutritional status, participants, who are top leaders in nutrition and experts from various NGOs in their respective countries, joined working groups about food security, micronutrient deficiencies and behavioral change and communications in order to develop draft reports for collaborative projects. The groups presented their proposals and set timelines and teams for publication of the working group reports as well as fundraising efforts.

Tufts University, USA also developed an important collection of peer-reviewed literature relevant to Palestinian and Israeli communities about food security and MNDs and is available at http://nutrition.tufts.edu/conferences/childhood.

“If we are looking at trends over the past five years, we are seeing not only the continuation of existing MNDS, but also the emergence of deficiencies in zinc, folic acid and Vitamin E appearing which will impact our children first and hardest. We must take care of our children,” insisted Dr. Galal.

The American, Israeli and Palestinian scientists and academics at the conference enjoyed working together and did so effectively. “The obstacle in collaboration has usually been at the political level,” claimed Dr. Galal.

References
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Study Break
from the Conflict

by Noa Cedar

Imagine you’ve finished attending classes for the day. You know you have four hours of research to do at the library and at least two hours to study for an exam tomorrow. You’ve planned out exactly how you’re going to organize your time and then, “PIGUA” – a terrorist attack. A suicide bomber blew up a bus in the center of Jerusalem. Instantly everything changes; people are on their cell phones checking on the safety of friends and relatives. Radios are blaring. There is a new reality. Research at the library? Study for an exam? There’s no way to concentrate on anything but the recent events.

Studying among a population that is divided politically, ethnically, religiously and nationally is not simple. Walking through the corridors on a normal day absent of terrorism, you can feel the tension in the air. People not only dress differently, they think and act differently. Instead of opening up to new social experiences and building dynamic interesting relationships, students protect themselves by socializing only with people with whom they feel safe. This limits opportunities for mutual cooperation and enrichment.

However, like everyone, I persevere. I am pursuing my field of interest which is maternal and child health. I am particularly interested in working with women from the Jewish ultra orthodox and Arab populations in Israel. Both of these groups share a common factor in terms of maternal and child health - they have high birth rates. Therefore, there is a great need for public health intervention. The Masters project I am pursuing is about home births - its cultural aspects, advantages and disadvantages in both the Arab and ultra-orthodox communities.

Studying in the international public health program at Hebrew University has broadened my university experience immensely especially during such tense times. I have become aware of problems other countries have to face in order to develop and protect its people. While security is high on our agenda, here, there are other issues that are essential - health education, communicable disease control and a keen understanding of population behavior.

I am learning the importance of these topics mostly by meeting other students from all over the world who feel a tremendous responsibility towards their own countries. These students are studying public health so they can contribute to their home land which are mostly developing countries where infant mortality rates soar and infectious diseases are rampant. This helps put my own worries into perspectives. There is a tremendous feeling of camaraderie between us. These relationships have been an inspiration to me and make the world smaller and safer for me.

Noa Cedar was born in Jerusalem. Her background is in medical sciences. She is currently studying at the Hebrew University in the International MPH Program.
Every day at 7:30 AM sharp, Prof. Hani Abdeen leaves his apartment in Bet-Hanina, a neighborhood on the outskirts of East Jerusalem, to go to work. For Prof. Abdeen, 'work' means not only multiple positions, but also multiple locations. Abdeen, 52, is the Head of Internal Medicine at Augusta Victoria Hospital on Mt. Scopus, Dean of the Medical School of Al-Quds University and Director of the Health Sciences Center at Al-Quds, which is certainly enough to keep him busy.

The separation wall and never ending checkpoints make this endeavor even more complicated. What used to be a short trip from home to the hospital or from the hospital to the University is now quite an ordeal. The normally five minute drive, has turned into a half hour detour on a “good” day. “When you are both a clinician and an administrator, every moment counts,” says Prof. Abdeen. “It doesn’t even make me angry; it just feels stupid.”

For Prof. Abdeen, the time lost is more than just a technicality. It’s a real burden and constant source of grievance. For instance, he had to shorten his time at the teaching rounds in the hospital to get to the university in time. Still, this native born Jerusalemite is quite lucky. His Jerusalem ID and the yellow (Israeli) plates on his car, make this commute possible at all.
His students, on the other hand, are often less fortunate. Closures, checkpoints and curfews constantly disrupt their carefully crafted curriculum. As a dean, their many problems become his one huge problem. “Imagine the state of a student coming into the hospital having been harassed on the way,” he says in a matter of fact voice. “But also,” he admits, “it’s a trigger for creative thinking and solutions.” Some time ago, he was summoned to a police post to release 12 of his students, detained from going from Al-Quds campus in the West Bank to Augusta Victoria Hospital in Jerusalem without a permit. What do you do when the age for permits is over 25, but the students are much younger? Since then, he has managed to reach a special agreement with the authorities, and decreased the age limit for permits for medical students to 21.

“A lot of my time is devoted to silly issues,” he sums up his victory. One could say that Prof. Abdeen’s daily routine is very different from the one of any other dean of a medical school. He doesn’t cope only with a complex academic curriculum and an administrative workload; he also serves as a psychologist, social worker and mediator between his students and the different elements of occupation.

This is not the way it was supposed to be when the first Palestinian medical school opened in 1994, soon after the Oslo Accords. Eleven years and 120 graduates later, the very existence of Al-Quds medical school, just a mile away from the medical campus of Hebrew University, is a fact not known to most Israelis.

The Palestinian state is still a dream and the graduates of the first and only Palestinian medical school do not get accreditation from Israel or from the World Health Organization (WHO). Prof. Abdeen, an expert in detours, used his personal contacts in England to convince the British Medical Council to grant accreditation to his graduates on an individual basis. He then tried his luck with the United States and worked out a similar arrangement. Yet, the Jerusalem ID holders among his students cannot work in an Israeli kapat holim (Sick Funds) around the corner.

Frustrating! “Of course,” admits Prof. Abdeen, who is still extremely proud of his pioneer project that brought back Palestinian expatriates to teach basic medical sciences. Unlike the expatriates, students from Gaza have no access to the campus in Al-Quds. “The solution to this conundrum could be a nice topic for a reality TV show,” describes Prof. Abdeen of the different methods developed to cope with this situation. “They graduate without ever being at Al-Quds. We monitor them from a distance. Since I predict the situation is just going to get worse, we are in the process of establishing a distance learning tele-video system. We cannot afford to get frustrated. The whole idea is to get us frustrated, isn’t it?”

That’s exactly what Prof. Abdeen keeps telling his students. Unlike in any other medical school, at least one of his five weekly sessions with students is dedicated to bearing their hard feelings and bitterness. A student gets delayed because of the checkpoints! “Get up an hour earlier,” suggests Abdeen; a student complains about the harsh treatment by soldiers on the way to the campus? “Don’t let them achieve their goal,” Prof. Abdeen tells the students. “They want to keep you ignorant. They want you to stay simple laborers. Try harder.”

Quite often, these issues cross the line of theoretical analysis of medical ethics and Hippocratic Oath to deal with real life dilemmas. Once, they dealt with the question ‘if a helicopter with Israeli soldiers crashes nearby, do you treat them?’ Most of the students said “yes, we do,” but then expressed a wish for the soldiers to disappear out of sight. Suicide bombings, become another ethical issue for medical students, trained to save lives. Most of them condemn the phenomena; some say that knowing the circumstances, they could do the same. It saddens him, but does not really surprise him, that the students who enter medical school with liberal and moderate ideas, graduate more conservative, to say the least. “It’s opposite of what is to be expected, but that’s the truth,” says Prof. Abdeen.

“I have a visual criterion. First year, about 30% of the female students wear a headscarf; upon graduation, 90% do.”

Despite all these unique difficulties, the school is a tremendous source of pride for Prof. Abdeen. Hospitals in Amman, for instance, are actively searching for his graduates to staff their facilities. And, it’s important not to forget the Palestinian mother, proud of her child, the doctor. At least this is something Palestinians and Israelis share in common.

**Lily Galili** is a reporter who focuses on social issues for the daily Hebrew newspaper, *Ha’aretz*. 
Ten years ago, a Palestinian man from Gaza met Prof. Rivka Carmi, now Dean of the Health Sciences Faculty at Ben-Gurion University, about his daughter’s rare disease. Over the years, Prof. Carmi developed a special relationship with this family until the current conflict disrupted it.

Prof. Carmi, 56 years old, recalls the days when the young, Palestinian girl was able to travel back and forth to her clinic to undergo various diagnostic tests. “Now she is probably thirteen or fourteen years old and she needs an operation that can not be performed in Gaza and this upsets me because I know that we can help her here,” laments Prof. Carmi.

Just until two months ago, the father was in touch with Prof. Carmi. But for unknown reasons, she stopped hearing from him. “When I call the number the father gave me I get no answer. I don’t know what is happening with them; I am very
worried,” said Prof. Carmi adding, “I am not able to implement my capabilities to help somebody else. This conflict has impaired my abilities to practice my profession.”

Born in the town of Zikhron Yaakov in Israel, Prof. Carmi excelled in her professional life. After graduating from Hebrew University Hadasah Medical School in Jerusalem, she moved to Beer Sheva in the Negev before going to the United States for her training in medical genetics. She moved back to Israel where

she became the Head of the Genetics Institute in Soroka Medical Center and five years ago she was elected to be the Dean of the Faculty of Health Sciences at Ben-Gurion University and also serves as the Head of the Medical Deans Association in Israel.

For many years, cooperation between Palestinian and Israeli doctors was part of Prof. Carmi’s daily life, but the eruption of the conflict four and a half years ago ended everything.

“Up until five years ago, we had a lot of research cooperation which ended completely because of the conflict. We also had medical relations; we used to go to Gaza to give consultations,” she says.

Prof. Carmi believes that the lack of cooperation is a result of technical problems arising from the conflict. “The lack of cooperation is mainly technical because whenever something huge happens, the atmosphere is emotionally poor for research but even on a daily basis when we don’t have something dramatic going, we can’t move from one place to the other and this is very disturbing,” she explains.

To try and maintain contact with her Palestinian colleagues, Prof. Carmi spoke on the phone and communicated via e-mail and sometimes met with them outside the country. “You can call and write e-mails to a certain extent but cooperation is about meeting together and sitting in the same room and talking about things in general and this was technically not possible for a very long time,” Prof. Carmi explains.

For Prof. Carmi, both the Palestinians and Israelis are paying the price. “People cannot get the appropriate treatment and in research we are not making as much progress as we could,” she says.

The new relations emerging between the Palestinians and Israelis in the recent months give Prof. Carmi hope. “I’m very happy to tell you that things are improving now and just recently I met two physicians from the West Bank. We will start cooperating on research projects together. There are many similarities between our neighborhood in the Negev and their community in the West Bank. For example, inter-marriage is a problem among the Bedouin families in the Negev as well as communities in Palestine, so we have common goals both in research and in health services,” she explains.

Prof. Carmi hopes to see the medical school in Al-Quds University in Jerusalem eventually recognized. “Israel does not officially recognize Al-Quds University and because of that, students don’t have the opportunity to use the facilities in Israel. We are trying hard to overcome this barrier but unfortunately this will only get better when the conflict will be over and the Palestinian state will be established.”

For Prof. Carmi, leaders can make decisions but it’s the people who bring it to reality. “Leaders can sign agreements but if people don’t cooperate nothing will happen. We may have it on paper but not on the ground,” she claims.

Daily life doesn’t feel normal under the conditions of the conflict for Prof. Carmi who says, “The conflict is like a big cloud on our life; I feel it the most when I travel out side Israel, where I don’t have to hear what’s going on the radio all the time and people are living normal lives. Only then I realize how much we are deeply occupied and affected by this conflict.”

**During the Conflict**

Abd el Raouf Arnaout, born in East Jerusalem, is the political correspondent at Al-Ayyam daily newspaper published from the West Bank city of Ramallah. Since the establishment of the Palestinian Authority, he has covered Palestinian-Israeli relations.
**Malnutrition**

Malnutrition means “badly nourished” but it is more than a measure of what we eat, or fail to eat. Clinically, malnutrition is characterized by inadequate intake of protein, energy, and micronutrients and by frequent infections or disease. Nutritional status is the result of the complex interaction between the food we eat, our overall state of health, and the environment in which we live – in short, food, health and caring, the three “pillars of well-being”.

**Malnutrition: Casting Long Shadows**

Although often an invisible phenomenon, malnutrition casts long shadows, affecting close to 800 million people – 20% of all people in the developing world.

- Malnutrition kills, maims, cripples, and blinds on a massive scale worldwide.
- Malnutrition affects one in every three people worldwide, afflicting all age groups and populations, especially the poor and vulnerable.
- Malnutrition plays a major role in half of the 10.4 million annual child deaths in the developing world; it continues to be a cause and consequence of disease and disability in the children who survive.
- Malnutrition is not only medical; it is also a social disorder rooted in poverty and discrimination.
- Malnutrition has economic ripple effects that can jeopardize development.

**Determinants of Malnutrition**

**Poverty-driven hunger**

Compared with the relatively recent past, today we live in a world of abundance. Improved health and increasing agricultural productivity in the 20th century have catalyzed unprecedented social and economic transformations. In theory, there is more than enough food for all. The problem is that food is neither produced nor distributed equitably. All too frequently, the poor in fertile developing countries stand by watching with empty hands – and empty stomachs – while ample harvests and bumper crops are export-
ed for hard cash; short-term profits for a few, long-term losses for many. Hunger is a question of mal-distribution and inequity – not a lack of food. That is why, despite abundance, hunger hovers; despite progress, poverty persists. **Development-driven obesity** Simultaneously, “globesity” – a swelling global tidal wave of obesity and diet-related diseases – threatens to envelop us as globalization changes the nature of the world’s nutrition. Yet another form of malnutrition, development-driven obesity, is emerging among all age and socioeconomic groups, especially in countries caught up in the swiftest societal transition. As a result, diet-related diseases, such as diabetes, cardiovascular disease, hypertension, stroke, and cancer – previously regarded as “rich men’s diseases” – are now escalating in developing countries, superimposed on precarious health systems already buckling under the double weight of communicable and other non-communicable diseases. **Downward Spiral** Malnutrition is the single most important risk factor for disease. When poverty is added to the picture, it produces a downward spiral that may end in death:

- Poor people may eat and absorb too little nutritious food, making them more disease-prone.
- Inadequate or inappropriate food leads to stunted development and/or premature death.
- Nutrient-deficient diets provoke health problems; malnutrition increases susceptibility to disease.
- Disease decreases people’s ability to cultivate or purchase nutritious foods.

This need not be so. Better nutrition is a prime entry point to ending the malnutrition maelstrom. Better health means stronger immune systems which mean fewer illnesses. Healthy people feel stronger, can work better and may have more earning opportunities to gradually climb out of both poverty and malnutrition. As a result, healthier, more productive societies are a potential outcome.

**WHO Nutrition Timeline**

- **1948** – Article 2 of the Constitution of the World Health Organization specifically includes the improvement of nutrition among the declared functions of WHO.
- **1978** – The Declaration of Alma Ata lists promotion of food and nutrition as one of the eight essential elements of primary health care.
- **1981** – The Global Strategy for Health for All features nutrition as one of its cornerstones, and three of its twelve monitoring indicators are nutrition-related.
- **1990** - The World Summit for Children identified eight nutrition goals for the year 2000.

**“Diet-related diseases, such as diabetes, cardiovascular disease, hypertension, stroke, and cancer – previously regarded as “rich men’s diseases” – are now escalating in developing countries”**

**“Everyone, without distinction of age, sex or race, has the right to nutritionally adequate and safe food and to be free from hunger and malnutrition.”**

**WHO Mandate**

Our vision is of a world where people everywhere, at every age, enjoy a high level of nutritional well-being, free from all forms of hunger and malnutrition. It is founded on the intrinsic value of human life and the dignity it commands, as reflected in the international human rights instruments adopted over the last half century. Everyone, without distinction of age, sex or race, has the right to nutritionally adequate and safe food and to be free from hunger and malnutrition. It rests on the conviction that hunger and malnutrition are unacceptable in a world that has both the knowledge and the resources to end this widespread, continuing human catastrophe. It recognizes that hunger and malnutrition are rooted in poverty, deprivation and underdevelopment, and are the result of inadequate access to the basic requirements for nutritional well-being including safe and adequate food, care, health, education, and a clean environment. WHO, with its health sector focus, has a major responsibility for promoting healthy nutrition for the entire world’s people, through collaborative support to Member States, particularly in their national nutrition programs, in partnership with other intergovernmental and nongovernmental organizations, and their related sectoral approaches.

Compiled by Mohammad Shahjahan
Sources: www.who.int/nut/nutrition2.htm www.who.int/nut/nutrition3.htm www.who.int/nut/mandate.htm
There is a general agreement that primary care (PC) is characterized by being the first contact between an individual and a health worker in a health maintenance organization (HMO) or Mother and Child Clinic or other health/medical service. In general, PC is of universal accessibility and the closest contact with members of the community, even under a state of conflict. Although there is awareness that preventive activities are indicated, services are heavily based on demand, mainly of a curative nature.

To achieve a community-orientation in primary health care it is necessary to introduce a community medicine approach, which is much broader than merely having medical services in the community meaning that simply the physical location of the service and providing health education in the community are not enough.

Questions to Answer in Community Medicine

The main components of community medicine are an active assessment of the health status and the subsequent provision of health care directed to the community as a whole (1). In operational terms, it requires implementing activities that answer 5 cardinal questions (2):

1. What is the state of health of the community?
2. What are the factors responsible for this state of health?
3. What is being done about it by the health services and by the community itself?
4. What more can be done, what is proposed and what is the expected outcome?
5. What measures are needed to continue health surveillance of the community and to evaluate the effects what is being done?

The Community Oriented Primary Care (COPC) approach is an illustration of community medicine and a response to these 5 questions aiming at developing public health at the community level. It is considered to be a reflection of the Alma Ata recommendations. Because of the comprehensive scope of the approach, it is also considered as a strategy to reduce health disparities. The development of this approach, whether as a re-orientation of an existing service or as the creation of a new health service, requires the commitment of the health practitioners to extend their individual clinical practice to the practice of community medicine.

The main components of COPC include:

- A defined total population (neighborhood, place of work, members of an HMO)
- A primary care clinic with multidisciplinary team with free access and outreach activities (to identify physical and social determinants and local resources)
- Promotion and facilitation of community involvement
- Intersectoral cooperation since health services cannot cope and deal with the health problems on its own.

What are the stages of COPC?

1. Definition of the target community and its characterization with regard to physical, demographic and social features, services available and health status, as based on available information;
2. Prioritization of the identified health problems using defined criteria, (e.g.: relative importance of each problem, feasibility and predictable effectiveness of intervention, community concern and interest);
3. A community diagnosis which measures the distribution and determinants of the selected health condition;
4. Implementation of a community health program that includes promotion, prevention, treatment and rehabilitation, considering the social, cultural behavioral and economic components of health;
5. Surveillance of health and monitoring of activities;
6. Evaluation of the impact of the interventions;
7. A re-assessment to decide about the continuation of the program and if new prioritization is needed. In this way the systematic cyclic process is continued and sustainability may be assured.

Is community medicine effective?

The impact of COPC has been demonstrated with regard to reduction of infant mortality and incidence...
of infectious diseases, increase in immunization coverage and improvement of growth and development, control of risk factors of chronic diseases and changes in health behavior. A recent issue of the American Journal of Public Health, November 2002 (vol. 92), has a series of eight articles on COPC (with a total of 200 references) showing the impact of this approach in different countries and health system contexts (Israel, Spain, UK, US, among others).

The COPC approach generates basic questions that have to be dealt with: is it feasible to be responsible for a total defined population under the current organization of health services? Are health professionals willing to assume this function? Sometimes the statement is made that this approach is only applicable in “developing situations”. Is this statement relevant? Experience shows that by the adoption of the principles and the adaptation of the methods to each particular local situation, the COPC approach has an impact on a community’s health. Why is this method of delivery of care increasingly used in teaching but has not yet had a broader parallel application in practice? These questions are not rhetorical. The answers should be assessed for their value and relevance in each local situation.

Please send your comments to bridges@who-health.org

Jaime Gofin, former Director of COPC programs at the School of Public Health and Community Medicine at Hadassah is the Chairman of the Task Force on Integrating Medicine and Public Health of the Network, Towards Unity for Health, a WHO related NGO and Adjunct Associate Professor of GWU in Washington, DC.

Dear Editor,

At the onset I would like to thank you very much for all the effort you put to produce bridges which is a real excellent idea. My message does not mean that I am against the whole content of the magazine. In contrast I am completely with it but I do have one main point.

As far as I know, bridges is a pure public health magazine and looks at the joint Palestinian/Israeli health issues as a means to enhance both sides’ peace talks. However my main point is that there should be no room for the conflict related pictures (the picture of the suicide bomb victim) and my suggestion is to keep it away from bridges but if there is no way to keep it aside I believe that you have to consider putting one of the thousands pictures that shows the suffering Palestinians undergo as well. I really wish that bridges would be the place of fairness and equality and be the root of the factual peace bridges between the two people will be built very soon.

Hamada Al Bayari
UN Office for the Coordination of Humanitarian Affairs (OCHA) - Gaza

Best wishes and a call to organizations of people with disabilities.

Dear Editor,

I would like to express my deep appreciation to bridges. I was attracted to read word by word and I have the feeling that bridges together with sincere cooperation of Israeli and Palestinian health professionals really helps to construct the bridge to peace.

I am a scientist and I am a woman bound to a wheelchair. I am active in a number of Israeli organizations of people with disabilities. I am also a member of the Advisory Committee to the Commissioner for Equal Rights of Persons with Disabilities in the Ministry of Justice. New winds of equal rights for people with disabilities blow in Israel. I encourage Palestinian people with disabilities and the families to start a dialogue - to exchange ideas and to establish a new, big organization consisting of our two communities.

Henia Schwartz
School of Public Health, Jerusalem
henia_schwartz@yahoo.com

Dear Editor,

It is only by chance that I came across the second issue of this magazine and it is a pity. I feel that every doctor, nurse and other public health worker in Israel and the Palestinian Authority should know about this publication, get it read it and participate in its development. Although it is very difficult it seems to me that health care is the most suitable bridging technique between the two notions. I would like to know how I can get the magazine on a regular basis.

Sincerely,
Prof. Isaac Meller
Head of the National Unit of Orthopedic Oncology, Tel Aviv Sourasky Medical Center

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