
Health, Exercise & Nutrition

Module 3 • i2P • Expedition India



Source: [Nevit Dilmen](#)

Take Home Points (Outline 2 - 4 important take home points for students - based on main theme)

- Physical activity is one of the most important factors for maintaining health.
- Nutrition is another critical element for all people to stay healthy.
- Many health problems around the world relate to lack of physical activity and to poor nutrition.
- Poor nutrition can be 1) eating a diet that is high in calories and low in nutrients, or 2) malnutrition which means not consuming enough calories or nutrients.

“Childhood obesity is one of the most serious public health challenges of the 21st century.”

- The World Health Organization



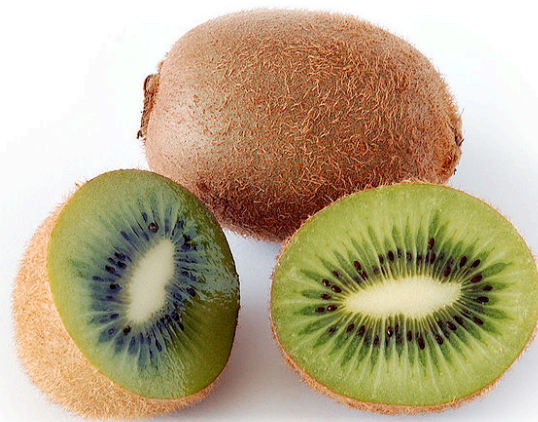
TOPIC

Regular physical activity and good nutrition are regarded as critical components of a healthy lifestyle. Recently, this belief has been reinforced by scientific evidence linking physical activity and nutrition to a wide array of physical and mental health benefits. Unfortunately, despite this evidence, millions of people in the West remain essentially sedentary. Further, according to the World Health Organization:

“Unhealthy diets and physical inactivity are key risk factors for the major noncommunicable diseases such as cardiovascular (heart) diseases, cancer, and diabetes.”



Source: [Softeis](#)



Source: [Andre Karwath](#)

and

“The problem is global and is steadily affecting many low- and middle-income countries, particularly in urban settings. The prevalence has increased at an alarming rate. Globally, in 2010 the number of overweight children under the age of five, is estimated to be over 42 million.”

The objectives of this module are:

- a. to help students explore the differences in physical activity levels and nutrition between western countries and developing nations such as India, and
- b. to empower students to explore ways to increase physical activity and improve the nutrition in their communities.

ROUTE

During the i2P expedition to India the team will highlight how the local population participates in physical activity and explore what the local issues related to nutrition are. We will do so in an urban area (New Delhi) and in a rural setting (the Thar Desert). India



Did You Know?

The fundamental causes behind the rising levels of childhood obesity are a shift in diet towards increased intake of energy-dense foods that are high in fat and sugars but low in vitamins, minerals and other healthy micronutrients, and a trend towards decreased levels of physical activity.

- The World Health Organization

Figure 1: Physical activity is of significant benefit to your long term health (source: [Sebastien Mary](#))

Did You Know?

Under-nutrition, including vitamin and mineral deficiencies, contributes to about one third of all child deaths, and impairs healthy development and life-long productivity.

At the same time, growing rates of overweight are linked to a rise in chronic diseases.

- *The World Health Organization*

is a country that is developing very rapidly, so the theme of change will be prevalent in our explorations.

MAIN THEME

The main themes of this module are 1) Physical Activity and 2) Nutrition. These are 2 factors that contribute to health around the world. For most

people in the west, we can control our physical activity levels, and our nutrition. If we do this well we can live healthier, more energetic, happier lives (you will even do better in school!). Unfortunately, people in developing countries may not have the same ability to control their activity levels, and good nutrition may be very difficult to obtain. By exploring physical activity and nutrition in very different cultures (our homes and the urban and rural settings of India) we can learn a great deal about how we can all live healthier lives around the world.

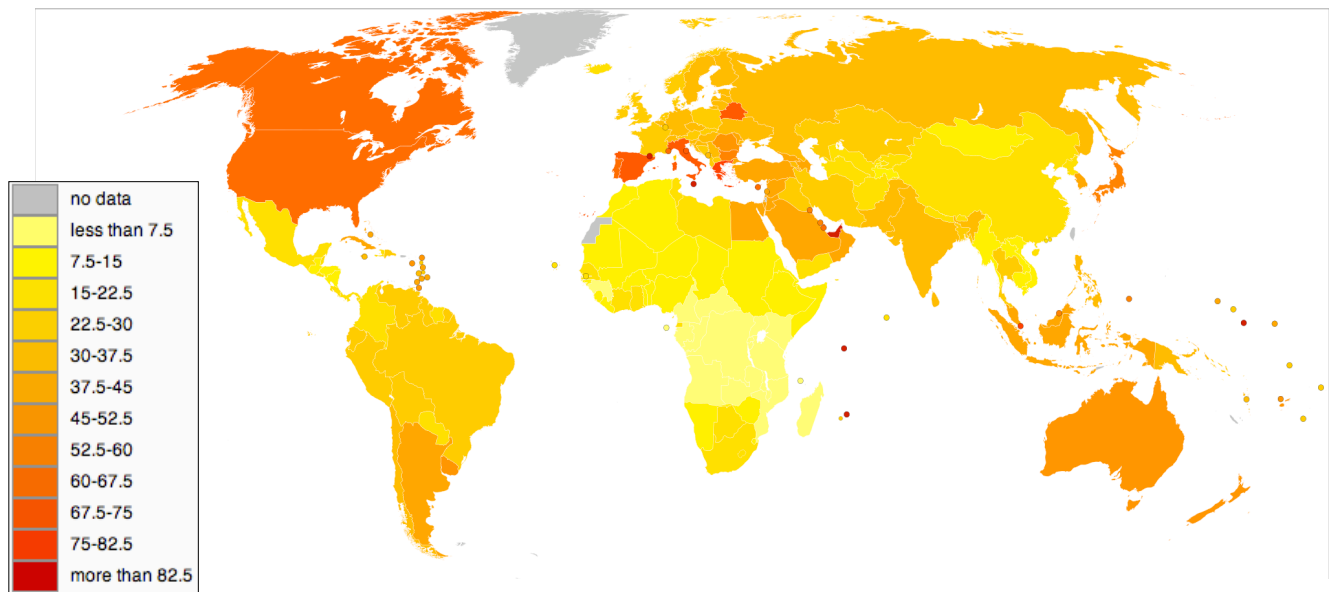


Figure 2: Prevalence of diabetes worldwide in 2000 (per 1000 inhabitants). You can see that diabetes is far more common in north america and Europe. Why is this? (source: [Lokal Profil](#))

Did You Know?

Globally, six percent of deaths are attributed to physical inactivity. This follows high blood pressure (13%), tobacco use (9%) and is equal to high blood glucose (6%). Moreover, physical inactivity is the main cause for approximately 21–25% of breast and colon cancers, 27% of diabetes and 30% of ischaemic heart disease burden.

- *The World Health Organization*



Figure 3: The television has contributed to decreased physical activity among children (source: [Takkk](#))

School Exercise

Have students make a list of their favorite foods. Students can also make a list of what they had that day for breakfast or lunch. Questions for students can be:

- Using nutrition calculators, how many calories are in your favorite food? In your breakfast? Lunch?
- How many calories should someone have per day to stay healthy?
- What vitamins and minerals are in the foods that you have studied?
- What food groups are represented in the foods that you have studied?
- What is malnourishment? Can someone in a western country be “malnourished”?