You Are What You Eat: Diet, Health, and Well-being

DFEND 2.0
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Objectives

1. Define well-being

2. Understand the impact of social distancing on well-being

3. Understand how well-being is measured

4. Understand how nutrition is linked to well-being

5. Identify nutrients and foods that are linked to well-being
Definition of Well-being

• The presence of positive emotions and moods (e.g., contentment, happiness)

• The absence of negative emotions (e.g., depression, anxiety)

• Satisfaction with life

• Fulfillment and positive functioning

Source: https://www.cdc.gov/hrqol/wellbeing.htm

Image: https://studentlife.umich.edu/article/what’s-new-your-health-and-well-being
Well-being includes:

• Physical well-being.
• Economic well-being.
• Social well-being.
• Development and activity.
• Emotional well-being.
• Psychological well-being.
• Life satisfaction.
• Domain specific satisfaction.
• Engaging activities and work.
Why Do We Care About Well-being?

• Integrates mental health (mind) and physical health (body) resulting in more holistic approaches to disease prevention and health promotion.

• Positive outcome that is meaningful for people and for many sectors of society, because it tells us that people perceive that their lives are going well.

• Measuring, tracking and promoting well-being can be useful for multiple stakeholders involved in disease prevention and health promotion.

Source: https://www.cdc.gov/hrqol/wellbeing.htm
Why Do We Care About Well-being?

• Well-being is associated with numerous health-, job-, family-, and economically-related benefits.

• Higher levels of well-being are associated with decreased risk of disease, illness, and injury; better immune functioning; speedier recovery; and increased longevity.

• Individuals with high levels of well-being are more productive at work and are more likely to contribute to their communities

Source: https://www.cdc.gov/hrqol/wellbeing.htm
How Does Well-being Relate to Health Promotion?

• Health promotion is the process of enabling people to increase control over, and to improve their health.

• Health promotion activities aimed at strengthening such individual, environmental and social resources may ultimately improve well-being.
  • Health is more than the absence of disease; it is a resource that allows people to realize their aspirations, satisfy their needs and to cope with the environment in order to live a long, productive, and fruitful life.
  • Health enables social, economic and personal development fundamental to well-being.
  • Environmental and social resources for health can include: peace, economic security, a stable ecosystem, and safe housing.
  • Individual resources for health can include: physical activity, healthful diet, social ties, resiliency, positive emotions, and autonomy.

Source: https://www.cdc.gov/hrqol/wellbeing.htm
Measuring Well-being

- Because well-being is subjective, it is typically measured with self-reports.
  - Surveys
  - Questionnaires

Source: https://www.pdffiller.com/307068384-EnglishQWB-SA_4pdf-Quality-of-Well-Being-Scale-Self-Administered-QWB-SA-V1-hoap-ucsd-
Eating well (i.e. a well-balanced diet rich in vegetables and nutrients) may be associated with feelings of wellbeing.

- One 2014 study found high levels of wellbeing were reported by individuals who ate more fruit and vegetables.
  
  - https://bmjopen.bmj.com/content/bmjopen/4/9/e005878.full.pdf

- Eating a selection of foods that meet your daily nutritional needs can help you improve your overall health and lead a healthy lifestyle. It can also help people with depression, anxiety, and other related disorders.
  

- Your gut microbiome may send signals to your brain that can affect mood, thinking skills, and memory.
  
  - https://www.health.harvard.edu/blog/nutritional-psychiatry-your-brain-on-food-201511168626
Evolution of Well-Being and Happiness After Increases in Consumption of Fruit and Vegetables

Redzo Mujcic and Andrew J. Oswald, 2016: Evolution of Well-Being and Happiness After Increases in Consumption of Fruit and Vegetables
7 Tips to Manage Mood with Food

1. Eat regularly
2. Stay hydrated
3. Look after your gut
4. Manage caffeine
5. Eat 5 servings of fruit and vegetables per day
6. Get enough protein
7. Eat the right fats

Well-being During COVID-19
Stress During the COVID-19 Pandemic Can Lead to:

• Fear and worry about your own health and the health of your loved ones, your financial situation or job, or loss of support services you rely on.

• Changes in sleep or eating patterns.

• Difficulty sleeping or concentrating.

• Worsening of chronic health problems.

• Worsening of mental health conditions.

• Increased use of tobacco, and/or alcohol and other substances.

Social Distancing Recommendations

• Physical distancing (6 feet/2 meters/2 arm lengths) by keeping a safe space between yourself and other people not from your household in both indoor and outdoor spaces.

• Limit contact when running errands.

• Avoid crowds and keep distance at events and social gatherings.

• Stay distanced while being active.

• Wear cloth face coverings

Impact of Social Distancing Recommendations on Health and Well-being

• Social isolation can increase the risk of heart disease, depression, dementia, and even death.

• A 2015 meta-analysis determined that chronic social isolation increases the risk of mortality by 29%.

• Weight gain due to unhealthy eating and physical inactivity.

References
Nutritional Recommendations During COVID-19

• Maintain a healthy lifestyle
  • Get enough sleep
  • Eat well
  • Exercise in your home when you are physically capable of doing so
  • Try to avoid using alcohol or drugs as a way to cope with the stresses of isolation and quarantine
  • If needed, consider telehealth options for psychotherapy.

Nutritional Recommendations During COVID-19

• Proper nutrition and hydration are vital.

• People who eat a well-balanced diet tend to be healthier with stronger immune systems and lower risk of chronic illnesses and infectious diseases.

• So you should eat a variety of fresh and unprocessed foods every day to get the vitamins, minerals, dietary fiber, protein and antioxidants your body needs.

🌟 Drink enough water.

• Avoid sugar, fat and salt to significantly lower your risk of overweight, obesity, heart disease, stroke, diabetes and certain types of cancer.

Impact of COVID-19 on Food Intake for Improved Well-being


• Cravings of comfort foods may increase due to stress and boredom
  • Food cravings: Desire to consume a specific kind of food
    • Emotional: intense desire to eat
    • Behavioral: actively seeking food
    • Cognitive: constant thoughts about food
    • Physiological processes
  • Women tend to have a higher prevalence for food cravings then men

• Carbohydrate cravings
  • Encourage serotonin production which has a positive effect on mood, however avoid simple carbohydrates which can lead to weight gain.
Impact of COVID-19 on Food Intake for Improved Well-being


• Sleep disturbances can increase stress and food intake
  • Consume food containing or promoting the synthesis of serotonin and melatonin at dinner.
    • Roots, leaves, fruits, seeds
    • Protein foods (milk, milk products)

  \[ \text{tryptophan} \rightarrow \text{serotonin} \]

• Consume foods that boost immune function
  • Fruits and vegetables with micronutrients (vitamins and minerals) and antioxidants that boost immunity.
  • Antioxidants increase the number of T-cell subsets
    • Beta Carotene: sweet potatoes, carrots, green leafy vegetables
    • Vitamin C: red peppers, oranges, strawberries, broccoli, mangoes, lemons
    • Vitamin E: vegetable oils, nuts seeds, spinach, broccoli
    • Vitamin D: sun exposure, fish, liver, eggs, foods with added vitamin D
    • Zinc: poultry, red meat, nuts, seeds, beans, lentils
Nutrients 2020, 12(6), 1562; [https://doi.org/10.3390/nu12061562](https://doi.org/10.3390/nu12061562)
Buy Foods that will Stay Fresh 1 Week or Longer to Minimize Visits to the Supermarket

- Breads
- Grains
- Fruits—sturdy fresh fruit (apples, citrus), dried, plain frozen, canned in juice or water
- Vegetables—sturdy fresh veggies (celery, broccoli, onions, potatoes), plain frozen, low sodium canned, sun-dried
- Sauces—tomato pasta sauce, salsa
- Soups & Broths—canned, frozen, shelf-stable cartons
- 100% Juice—refrigerated, frozen, canned, boxed
- Milk—fresh, canned, shelf-stable packages
- Eggs—fresh eggs, egg whites in cartons
- Cheese—sliced, cubed, shredded, crumbled, grated hard cheese
- Beans/Legumes—canned beans (black beans, chickpeas), dry beans
- Nuts and seeds—bagged, canned, nut butters
- Chicken—frozen or canned
- Seafood—frozen ready-to-cook fish fillets, frozen shrimp, canned tuna, salmon, and sardines
- Beef—pre-made frozen lean ground patties or meatballs
- Flavorings—add flavor with dried herbs & spices, vinegars, mustard, hot/steak sauces, lemon/lime juice, light dressings, honey, Greek yogurt

Take Home Messages
Eating a selection of foods that meet your daily nutritional needs can help you improve your overall health and well-being.

This includes:
1. Eat regularly
2. Stay hydrated
3. Look after your gut
4. Manage caffeine
5. Eat 5 servings of fruit and vegetables per day
6. Get enough protein
7. Eat the right fats
8. And don’t forget... physical activity!

Image: https://studentlife.umich.edu/article/what’s-new-your-health-and-well-being
Questions