Diet, Health and Wellness

Abstract

Food is part of us: it is nutrients, tastes, and flavours...and it is one of the basic social ways we spend time with others. So it is important to know conscious approaches to it, to choose wisely how we eat, to regulate our diet at better, to have healthy and pleasant foods, and to prefer social eating solutions.

No matter if we are in fit or we want to improve our BMI, we should choose healthy foods, like organic ones, we should balance our diets with the best proportions of nutrients, and we should know which flavors adapt to our way of being (according to traditional chinese medicine, for example); or in case of diabetes, or other dysmetabolisms, we should even more pay attention to our nutrition and lifestyle, in order to stay in the better equilibrium. Even pregnancy, infancy, and sport habits need particular attentions, since all are physiological situations in which diet has an important role.

Understanding how considering our daily and weekly nutrition is the first step. Then we should choose the foods, amongst the healthiest, that fit best to our preferences. And moreover it would be important to have a regular physical activity, in order to get to fitness body and mind conditions, and try to train with daily relaxation and mindfulness techniques as well, like yoga, zen practices, or maybe others based on concentration or even visualization. In case of some dysfunctions we could recur to CAM strategies: complementary and alternative medicines are considered more and more important and worth (like acupuncture, fitotherapies, mental training and so on).

The basis could be the mediterrenean diet, declared in 2010 "intangible cultural heritage for humanity" by Unesco, and typical of mediterrenean countries: the world "diet" comes from the ancient greek world "διαιτα" that means "lifestyle" indeed. So preferring complex carbohydrates (at lower glycemic index), white meats, fish (rich in omega-3), some fresh cheese, and lots of vegetables and fruits (for vitamins and fibers), dry fruits and nuts (containing omega-6), adding some herbs and spices as well (I can say that for some cultures, like ayurveda, they are a real healing system), evitating sweets and fats (helping in such a way metabolism), and reducing coffee as well, is the ‘nutrition side’; to this we should also have a daily sport activity and if we can find some time to relax at sun it would be great for our body and mind as well - vitamin D is related to higher fertility rates according to recent studies.

In conclusion we can underline the relationships between nutrition, lifestyle, emotions and reward system, the brain pathways involved in the modulation of stress and in the wellness perceptions and feelings, that are the basis for healing, resilience and health: even World Health Organization declared that health is not the absence of diseases but it has to be the complete body and mind well-being.

Keywords: Diet; Nutrition; Lifestyle; Wellness, Health; Reward; Fitness; Mediterranean diet; Italian Cuisine; Turkish cuisine; TCM; Food culture; Ayurveda; Multi-Strategies; Right to food

Introduction

Food & well-being

Food is what we are, since we are, in our material constituents, composed by glucides, protids, lipids, and since we use ATP molecules to get energy for our metabolic processes and food is essential to feed our body and soul as well.

In this opinion article I will focus on basic diet knowledge, and also underline how food is an essential part of our life for wellness achievement: I will talk also about some ideas from traditional chinese medicine and culture, and from ayurveda philosophy regarding food and eating.

The “right to food” is included in the Constitution laws of more than 20 countries of the world, and even Universal Declaration of Human Rights (1948) talks about that; in the International Covenant on Economic, Social and Cultural Rights (1966.12.16) 145 countries established in article number 11: “The States Parties to the present Covenant, recognizing the fundamental right of everyone to be free from hunger, shall take, individually and through international co-operation, the measures, including specific programmes, which are needed:

a) To improve methods of production, conservation and distribution of food by making full use of technical and scientific knowledge, by disseminating knowledge of the
principles of nutrition and by developing or reforming agrarian systems in such a way as to achieve the most efficient development and utilization of natural resources;

b) Taking into account the problems of both food-importing and food-exporting countries, to ensure an equitable distribution of world food supplies in relation to need:"

So from one side, we should all be interested in learning a better knowledge about our daily diet: since how we eat impacts on our metabolism, and it is common known that our health is strictly related to that. On the other hand it is fundamental that politics gets involved in such topics:

1. At first creating the concrete basis to guarantee the primary right to food to everyone in the World

2. Secondly diffusing nutritional culture so to reduce social diseases as dysmetabolism, diabetes, and psychological aspects related to that - the My Plate (2011) guideline by USDA is a great example of this knowledge diffusion intention and project. I will focus on the main elements so to improve our ideas regarding food.

Foods, Nutrients & Meals

We can basically distinguish foods from nutrients. Foods is what we buy at markets and supermarkets, what we grow in our yards, what we store in the kitchen and prepare in our dishes.

Nutrients can be divided into:
- Macronutrients, such as proteins, carbohydrates, lipids
- Micronutrients, such as vitamins and minerals

Diet "is what a person habitually eats and drinks". The word diet, as I said in the abstract, comes from the ancient greek word “διαιτήσις” that means "lifestyle": this makes us understand how, if we want to reach and maintain a well-being condition, we should act no only on what we eat, but also on how we live.

So foods are (according to italian LARN, the diet guidelines):
- Milk and dairy products - rich in Calcium and vitamins
- Meats, fish, eggs - mainly composed by proteins
- Cereals and tubers - made by amids
- Legumes - medium value proteins and fibers
- Fatty seasonings - giving high energy and essential fatty acids (poly-un-satured)
- Vegetables and fruit - rich in water, fiber, vitamins - we should eat 3-5 portions of them every day, and they should compose the majority of our daily nutritional diet. A good tip is mixing the more that we can all the foods.

We should create our meals in the way that fit us better:
- They should be regular, this according to all cultures - for example traditional chinese medicine imputes to meals irregularity lots of digestive dysfunctions (stomach diseases particularly).
- They should be non preserved food, and better if they are organic and locally grown, so to reduce the pollution due to productions and transports - I think that everywhere in the world there are local markets held by farmers that could suggest you the seasonal products and they should be:
  - A good breakfast - 15-18% of the total daily calorries; we should choose that according to our culture:
    - In Italy we prefer simple breakfasts: personally I like having milk with mildly sweet carbohydrates, such as simple breads, better if rye bread - you can add a fruit as well.
    - Or you can choose continental breakfast, including tea, french croissants or rusks or biscuits
    - It's a good start of the day even the english breakfast: with eggs and some carbs as well.
    - Or for example turkish people love to have as "kahvaltı" a bowl of “yogurt” and some "melas" that is the common molasses, plus some bread as well.
    - Chineses breakfast tradition includes: some noodles, made with different flours (as rice ones, and even seaweed), or some soya milk, and of course chinese tea.
    - Then, particularly if you do a high-LAF activity (LAF is a factor that a nutritionist multiplies with BM, the basal metabolism of carbohydrates consumed by basic body metabolic processes...to get the overall metabolism), such as a deep study or a heavy physical activity, you can have a snack as a break at half morning: you can choose a fruit, or a yogurt.
    - At lunch we can choose a “one-dish” meal: so we can see and control all that we eat, and we can also have a good visual effect great for our eyes; even better, if we compose the tastes and flavours in an armonic way, it would be nice also for our hearts...

I won't talk about local recipes but I would fastly write about some cultures nice dishes.

- Italian pizza can be a good one-dish: it contains complex carbohydrates, at medium glycemic index (I have to say that the more the carbohydrate is refined, the more glycemic index is high: that means more insulin secreated and worst impact on our metabolism), and it has also a good intake of vegetables (that you can add on top choosing the ones that you prefer), and even of proteins (mozzarella cheese has some, and you can add for example mushrooms), and of essential lipids (olive oil contains great essential fatty acids, such as oleic and linoleic ones, rich in omega-3).
- Generally speaking, the mediterranean diet is great for our health: studied by the american Ancel Keys, it is can be represented by a pyramid.
  i. On the basis: complex carbohydrates, vegetables and fruits, and of course water too - they compose every daily meal.
  ii. Then some proteins: we can get them from white meats, fish, dairy products, eggs, and legumes, that...
we can eat once everyday.

iii. According to this diet it’s better to avoid: red meats and sweets - personally I would suggest a so called “semi-vegetarian diet” that is a mainly vegetarian diets (in which one rule is associating vegetables sources of essential aminoacids: such as legumes and some cereals), in which you can add some white meats and other animal proteins - famous italian professors of medicine use to say that vegetarians live 8 years longer; it is also true that we reduce in this way the “environmental impact”: according to an american study big mammalians meats involves 28 times more use of land, and 11 times more of water, and also 15-20 times more of fodder consumed... so this is not sustainable by a growing planet; that means that we all should consider more mature and better eating strategies.

- The turkish çack is a good one-meal as well: it is made by fine chopped cucumbers, thick yogurt, garlic, olive oil and parsley.
- You can also choose well composed salads if you are out of home and you have few time to eat (for chinese culture it’s important to have slow meals so not to overload our digestion and respecting positive emotions involved in the eating process); you can have salad with some slices of... tomatoes, cucumbers, then add some olives, some fresh cheese, adding also a boiled egg, or some pieces of meats or fish, and if you don't have to follow a hypochalorical diet, dressing all this with some fine chopped nuts and olive oil.
- A nice chinese lunch meal can be tofu with broccoli: tofu is a good protein source, mainly made of soy; and broccoli are a great vegetable: rich in antioxidants, vitamins, and minerals, they also can help many physical dysfunctions (such as lung diseases, digestive problems) moreover they are a low chalories food.

• Then you can have another small snack for the afternoon break, if in high LAF conditions; turkish love to drink çay, the tea they have in the typical tulip shaped high glass; even chinese base on green tea their longevity secrets: tea is rich in polyphenols, that will reduce your stress amount, improving also your beauty "heart" deficit for TCM).

• At dinner you can also follow the My Plate suggestions, so to have in a medium-sized plate all that you will eat: one quarter carbohydrates, one quarter proteins, one quarter vegetables, one quarter fruit.

Other Suggestions

It’s better not to eat before sleeping, but for chinese tradition you can have a small fruit if you suffer from insomnia (typical of “heart” deficit for TCM).

It’s a great tip to always drink 2 or more liters of water: it will reduce your stress amount, improving also your beauty conditions; people can choose oligomineral waters, or even mineral ones if there are not contrindications. It’s better to avoid lots of sweet drinks, even fruit juices should be consumed with attention: you can check the label information and reduce the consumption of soda drinks containing "corn syrup" or "destrose" or "cane juice", all alternatives to the "glucose" wording.

Always pay attention to your fiber and chalories intake. Fiber should be high so to improve the abdominal peristalsis, reducing the stasis in this area. And chalories should, as I said, fit your extra consumption of chalories, according to your activities, overcoming the basal metabolism.

The proportions of the foods can vary: you can have a 65% carbohydrates diet, but in case of diabetes carbohydrates should be reduced to more or less 55%. The famous 40-30-30 zone diet (by american Barry Sears) is a possible way to reduce in weight, but I have to say that for muscular health, particularly if in fitness activities, it’s better to introduce also a good amount of carbohydrates, in order to preserve the glycogen quantity, so to save the proteins of the muscles.

In case of particular conditions you should have different diets, such as: sport activities, with an increase of +25% of proteins compared to basic diet; or pregnancy (in which it is important to follow a folinic acid supplementation diet), breast feeding, and childhood, in which proteins should be also increased.

It is always important to evaluate how to eat according to BMI (body mass index) and at the same time to take into consideration anthropometric parameters, so to have an idea of the proportion of free fatty mass vs fatty mass, that are different according to sex and so on.

Food is who we are since, according to genetics and nutrigenetics, we are made of genes, and how genes are depends on genetical pattern and on environment (50%-50%): epigenetics explains how behaviours impact on genes, and nutrigenetics underlines how even food acts on DNA, so on ourselves. It could also be important to use supplements: as lactics, or some vitamins and minerals, according to specific needs.

In conclusion of this paragraph I can say that particular kinds of patients need of course specific diets elaborated by multi-specialist groups of experts: I talk about diabetic persons, or those suffering from heart, liver or kidney diseases; they all would need a diabetologist, nephrologist, hepatologist, and internal medicine doctors suggestions, observing clinic and laboratory features. It is also important to formulate a positive approach to food and reward, as I will later examine.

Foods, Flavours & Cultures

From TCM to Ayurveda

Food and a correct diet are considered as great healing ways by maybe all cultures: particularly it is true that some medical knowledge as the ancient traditional chinese medicine and ayurveda (the world "ayurveda" means "science of life") ones have as main goal the improvement of quality and quantity of life, and they want to create a good longeviy for each individual following their suggestions.

They are both based on five natural elements, and on some healing systems:
• Huge philosophical ideas
• Meditation: zen for oriental culture and mantra for indian one
• Diet knowledge: based on herbs and spices too
• Physical activity: like qi-gong for chineses and yoga with asana for ayurveda
• And chinese health culture also recurs to acupuncture to treat all body-mind dysfunctions.

Flavours are a great element to take into consideration: since food is not only material but is mainly a sensory experience that we have to choose wisely and pleasantly according to our personality so to get from food the rewarding side to join a global wellness condition.

For chineses each elements corresponds to an organ and a bowel, and also to a specific taste and flavour:

Wood: corresponds to liver and gall bladder; and if we are in need to improve this element we have to prefer acid foods
Fire: corresponding to heart and small intestine, and it corresponds to bitter taste
Earth: spleen and stomach, and sweet taste
Metal: lung and large intestine, hot taste
Water: kidney and bladder, saltiness

Ayurveda takes into consideration a 6th taste that is: astringent. Another characteristic in TCM philosophy is the “nature” of food: cold and cool (milk and musrooms, for example), neutral, warm and hot (meat and spices). In case of a heat or yin-deficiency dysfunction the person should avoid hot foods, preferring cool ones, and so on.

Chineses also consider amongst the different kinds of qi, the essential and vital energy: the “gu qi”, the energy derived only from what we eat. Other characteristics typical of chinese nutrition are: rice as main dish, steaming foods as great cooking system, and finally preferring cooked foods (not raw) since chinese think that they can badly impact on all main organs (digestive ones, but not only), preventing in this way qi dysfunctions. Of course we could talk about a chinese dieta s well: since chineseas have nutritional remedies for all the main dysfunctions, from occidental or TCM point of view and balancing all the elements so to get an equilibrated intake, improved global metabolism and wellness.

Mediterranean culture makes large use of herbs: basil, parsley, rosemary, chives, sage, thyme. They can be added in typical tomato sauce, used to dress pasta and pizza; and you can use them also in meat roasted dishes, or in all vegetable meals. They all brings some mediterrenean flavour to your dishes, permitting for example to reduce the fatty dressings. In Italy they are typical of may-september season, and you can grow them in your yard as well.

Turkey has typical flavours, ingredients and dishes too - all can be included in a good mediterrenean diet; pistachios (anpet fısıği), peppers, eggplants, kebab (the meat dish that is diffused also in occidental world), ekmek (typical turkish bread), makarna (mediterrenean pasta), pilav (the rice or bulğur dish), dolma (vegetables filled in with rice), ayran (the drink accompanying all the main meals; made by yoğurt, water, salt), baklava (the typical dessert); onions and garlic and all the spices you can buy in any wonderful and colorful “Mos Çarşısı” the typical turkish Bazaar (how we can call the turkish “pazar” = market).

All cultures have their typical foods: Africa and South America are rich in local dishes and ingredients, and have also a great social food culture based on sharing it between friends and with foreigners as well. A great recent discovery of an ancient herb is stevia: the natural sweetener. It is a medium-sized plant typical of Andes region (plant that wild grows in Paraguay and at high altitude) with nice leaves from which a sweet powder can be extract. It is great in diabetes condition to help reducing the refined sugars, and it is nowadays introduced in many famous brand drinks so to have also less chalories in a 2 portions bottle. This thanks to its constituents: isosteviole and stevioside, that have a neurotransmitter-similar function.

I can also mention macrobiotics: this is a philosophical approach to life, that includes balancing yin and yang elements. It is mainly vegetarian, and prefers the consumption of soya and sea vegetables.

To conclude this paragraph I will briefly talk about curcuma or turmeric, the most known ayurveda spice. It derives from a root and it is the main ingredient of curry: the root is boiled and oven-dried then minced to get the yellow powder. Thanks to curcumin molecules, and according to Siddha system (1900 b.C.), it is a great remedy for lots of dysfunctions: skin diseases, digestive problems, liver diseases, allergies. Nowadays it is a popular idea that it can help preventing Alzheimer’s disease.

So we can see how choosing particular flavours for our diet can also help our health conditions, making us achieving a global wellness condition.

Food as Pleasant Experience
Multi-Strategies, Reward System, Social Eating

As final paragraph I will describe how food acts on our mind, thanks to brain molecules and pathways involved in the eating experience. Receptors in our tongue have lots of links to our CNS, and food is also visual sensations and of course smells and perfumes. So all these signals directly projects to wellness nuclei in brain. This system is called reward pathway. The main center is VTA, ventral tegmental area, in ventral midbrain: it is made by dopaminergic (and also serotoninergic) neurons projecting to lots of areas:

a) Thalamus
b) Amygdala - the big bilateral nucleus of fear and pleasure
c) Nucleus accumbens - in which good perceptions take place

d) Hypotalamus - that, with pituitary gland, regulates our instincts, thanks to hormone secretion

e) And cortical areas, such as limbic system, place of emotions, and pre-frontal areas, where behaviours are elaborated.

We can see in this way that food is a great part of our life and that we really get pleasure and wellness from it, particularly if our diet is well balanced.

We have to choose in a wise way:

- The foods we eat, the nutrients they have
- The tastes and flavours we prefer
- The colors that compose our dish

It is also great to follow a mediterrenean idea: sharing food with people we love, that is conviviality. Social eating is the best way to increase the reward we get from positive emotions deriving from socializing with nice friends or our partner and family, and in this way we can reduce also the intake, since we are happy while eating and we need to eat less to be satisfied. Eating with others is also a way to share our daily experiences, our opinions on common facts, and our ideas about the future, so to get comprehension and suggestions from our beloved. Alcohol can not be a good ingredient to add, since we don't need anything more to get well-being, and it is also highly addictive.

If we need to reduce weight and control our calories intake it is better to recur to multi-strategies (the so called integrated therapies):

1) A balanced nutrition for a good diet.
2) Physical activity: according to World Health Organization we should have at least 60 minutes per day of fitness exercise, since sedentary habit is more and more considered a real health killer.
3) Relaxations: sunbathing, oriental meditation, or even mental training are great way to focus on what we have to solve and on which strategies we can use to cope with any problem, so to join a good resilience (the psychological resistance that leads us to a higher interior strength)
4) Affective life is also determinant: love life is part of us and we should have the possibility to live our present and future with a partner who shares with us trust and belief.

Conclusive Perspectives
Food for Health & Wellness

In conclusion we can see how food is a great part of our life: we have to widen our knowledge about that, for ourselves and for our clients too, and it is also a pleasant sensory experience to choose, according to our preferences, to get a better well-being.

And in order to achieve a real wellness state, we should also regulate our global lifestyle, so to be in health, and with the better body-mind equilibrium that we can.

I want to conclude with two ancient proverbs:

- a smart turkish proverb “before attract the eye, then fill in the stomach”(Önce gözünü doyur sonra mideni) - that refers to some facts.

A food should be pleasant at first to eye, but it can also mean that we don’t have focus mainly on appearance...

We don’t have to pretend only to enjoy but that it is better go at the core of every life aspect, considering priorities in the right way.

- And a meaningful chinese saying “If a man is hungry, do not give him a fish, but teach him how to fish. Just like that you will not feed him for a day, but forever”[1-14].

Acknowledgement

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