Food & Mood

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What we eat = How we feel

- Grown accustomed to being under the weather or not up to par
- What we eat can have a profound effect on how we feel now & later
- There is no reason to put up with feeling bad, mindlessly overeating or thinking poorly
**Food & Mood is Cyclical**

- Poor eating habits = depression, mood swings, poor concentration or fatigue → more poor food choices
- Depression, tired or stressed = poor eating habits → feeling worse

**Immediate Food & Mood Connection**

- Getting by rather than feeling great
- Breakfast or lack of affects how clearly you think, food cravings & energy levels
- What was eaten 2 hours ago is having an effect on your mood right now
Long Ranging Effects

- Mood, thinking, energy level
- Protecting brain cells
- Handle stress better
- ↓ fatigue

Feel Better

- ↑ energy
- ↓ colds
- ↓ infections
- ↓ other illnesses
Food as Medicine

- Hippocrates
- Natural & artificial chemicals
- Powerful medicine
- Support our physical & mental health

General Eating Guidelines

- 45-65 % calories from complex carbohydrates
- 20-35 % from healthy fat
- 10-35 % from protein
- Limit intake of refined sugar, refined carbohydrates, processed foods, alcohol and caffeine
- Reduce exposure to pesticides and herbicides
- Eliminate the intake of artificial food additives, colors and preservatives.
- Eat a rainbow everyday
- Eat from an “ideal” plate
Whole Foods

What is a whole food?

Do I mean this?

Whole Foods
Ask yourself these questions

- Can I imagine it growing?
- How many ingredients does it have?
- What has been done since it was harvested?
- Is this product part of a food or the whole thing?
What is this food?

- Sugar, hydrogenated vegetable oil, high fructose corn syrup, water, sodium caseinate, natural and artificial flavor, polysorbate 60, sorbitan monostearate, xanthan and guar gums, sodium polyphosphate, beta carotene

Did you guess?

- It is Cool Whip, a whipped cream substitute
- Whipped cream has:
  - cream
  - sugar
  - vanilla (maybe)

3 vs. 15 ingredients
Should we eat processed food?

- Processed foods often contain additives and chemicals our bodies are unable to recognize.
  - Example: high fructose corn syrup

How can I tell?

- Cellophane wrappers
- Boxes
- Many ingredients and preservatives listed on the nutrition label.
During the refining process

- Fiber
- Vitamins
- Minerals
- Antioxidants
- Phytochemicals
- Are all lost
Why consume a Whole-Foods Based Diet?

- Better for the earth (sustainability)/animals
- Whole cells, so many nutrients
- Generally nutrient dense
- Synergistic effect of nutrients in whole foods
  - E.g. apple vs. apple sauce vs. apple juice
  - Scientific evidence vs. individual nutrients e.g. DASH diet and blood pressure, whole grains and type 2 diabetes

Eat Whole Foods

- Protein- meat, fish, poultry, legumes, fermented soy and eggs
- Healthy fats-avocados, nuts and seeds, olives, cold water fish
- Fresh vegetables
- Fresh fruit
Eat Whole Foods, continued

- Whole grains- wild rice, brown rice, quinoa, millet, amaranth, teff, barley, buckwheat, rye, whole wheat and oats

Organic?

- The rat's nose knows
- Higher antioxidants & phytochemicals
Why does organic produce have higher phytochemical levels?

- Phytochemicals are chemicals created by plants to defend themselves against microbes and microbes, to make themselves unpalatable. Most of the aromas of vegetables, herbs and spices come from defensive chemicals. They may smell pleasant to us but the plants make them to repel their enemies.

Why Change?

- Benefit from your efforts
- Recognize the longer-term benefits as being more important to you than any initial short term pleasure
Diet & Depression

- Influences brain’s behavior
- Brain chemicals (neurotransmitters) regulate our behavior & are closely linked to mood, are controlled by what we eat
- Dopamine, norepinephrine & serotonin
- Protein
- Essential fatty acids
- Vitamin B3 & B6, iron, folate, copper, calcium & magnesium
- Complex carbohydrates

Nutritional Causes of Depression

- Frequent consumption of caffeine or sugar
- Deficiencies of biotin, folic acid, pyridoxine (B6), riboflavin (B2), thiamine (B1), vitamin B12, vitamin C, calcium, copper, iron, magnesium, or potassium
- Excesses of magnesium or vanadium
- Food sensitivities
Foods Good to Eat

- Foods high in B1 (thiamine)
  - Essential for energy production, nerve cell function & carbohydrate metabolism
  - Deficiency can cause fatigue & depression
  - Rich sources include soybeans, brown rice, sunflower seeds, whole wheat & brewer’s yeast

Foods Good to Eat

- Eat foods high in B6 (pyridoxine)
  - B6 deficiency is associated with depression
  - B6 is important for maintaining hormone balance & immune function & is involved in the use & formation of neurotransmitters
  - Good sources- Brewer’s yeast, whole grains, legumes, bananas, seeds, nuts, potatoes, Brussels sprouts, cauliflower
  - Supplement with P-5-P (pyridoxal 5’ phosphate) an activated form of B6, if you have poor liver function
Foods Good to Eat

- Foods high in folate
- Folate deficiency is linked to depression
- Folate & B12 ↓ SAMe levels (associated with decreased serotonin)
- Sources- brewer’s yeast, green leafy vegetables, dairy & whole grains

Foods Good to Eat

- Vitamin C depletion leads to depression. It is important for the production of neurotransmitters & hormones.
- ↑ immune function by ↑ white blood cell activity, ↑ interferons, ↑ antibody response & levels, ↑ secretion of thymic hormones, and is also important in collagen formation. High urinary excretion of vitamin C occurs when you are emotionally & physically stressed.
- Found in red chili peppers, guavas, kale, parsley, collard greens, turnips, broccoli, Brussels sprouts, mustard greens, kiwi, strawberry & citrus fruits
Foods Good to Eat

- Add tryptophan, Tyrosine & Phenylalanine containing foods
- Tryptophan is a precursor to serotonin & melatonin. A deficiency of serotonin contributes to depression.
- Tyrosine is a precursor to norepinephrine and may stimulate thyroid hormone synthesis. Low levels have been seen with depression.
- Complex carbohydrate rich meals ↑ brain uptake of tryptophan. This has a calming effect, whereas excess protein tends to decrease brain tryptophan uptake. Carbohydrates promote sleep.
- Found in animal source foods- eggs, dairy, meats

More Foods that Help Moods

- Raw fruits & vegetables, bitter greens, dandelion greens, endive; these help cleanse the liver, improve digestion & aid in elimination of waste & toxins
- Salmon & white fish provide protein with EFA’s. People with depression have lower levels of PGE1 & ↓ activity of delta 6 desaturase enzyme (used to make PGE1 from EFA’s) reducing their ability to make PGE1, a natural modulator of pain & inflammation