

Food, Mood & Love

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Food & Mood

- Tremendous evidence linking what we eat and how we feel
- Many people unknowingly choose foods that aggravate:
Depression, insomnia, fatigue, food cravings, stress, memory loss



Food and Mood

- Making even small changes can have profound effect
- Link between food and mood is cyclical
- Initial problem may be poor eating habits
- Depression, mood swings, fatigue set in
- Results in more poor food choices



What's Your Food Doing for your Mood?

- You are what you eat
- If we truly are what we eat, what do your eating habits say about you?



Food & Mood

- Changes in the way food is produced have reduced the amounts of essential fats, vitamins and minerals consumed
- Altered the balance of nutrients in food
- Changes to animal diets have altered their body fat composition
- Intake of omega-3 has declined but omega-6 has increased

Food & Mood

- New research shows that our food supply has less vitamins and minerals than it once did
- We eat less fruits and vegetables than we once did and more fast food along with trans fats, pesticides and food additives
- These changes can leave people more open to depression, concentration and memory problems

Food & Mood

- Scientists at the Massachusetts Institute of Technology (MIT) first linked food with mood when they found that sugar and starch in carbohydrates boosted a powerful brain chemical called "**serotonin**"
- They linked serotonin and other neurotransmitters to our mood, energy levels and craving for highly processed foods

Food & Mood

- Serotonin regulates impulse control and appetite, elevates mood, self-esteem, feelings of optimism and induces calm feelings and sleep
- Researchers at the University of Michigan have linked the desire for sugar and fat to **endorphins** – naturally occurring substances in the brain that produce pleasurable feelings and also act as painkillers

Stress

- United States Department of Agriculture researchers studied physical and emotional impact a high-stress week had on people eating adequate diets
- Blood and tissue levels of certain vitamins and minerals dropped by as much as 33%



Immune system compromised

- Eating nutrient-depleted food can mean a weakened immune system
- Lowered resistance to ailments ranging from colds and infections to cardiovascular disease, diabetes and some cancers



Feeding the Mind

- Omega 3 fatty acids
- Complex Carbohydrates
- Protein
- Vitamins/Minerals
- Steady blood sugar levels



Avoiding

- Artificial additives – can cause sensitivities
- Added sugar – blood sugar highs/lows. Sugar sensitivities can produce symptoms of confusion, poor concentration, anxiety, irritability, aggression
- High intake of omega 6 fatty acids
- Stimulants – anxiety/panic attacks
- Wheat (gluten) and dairy if you are sensitive

Ingredients in Burger King bun

Enriched Unbleached Wheat Flour (Wheat Flour, Malted Barley Flour Or Alpha Amylase From Aspergillus Orizae, Niacin, Iron, Thiamin Mononitrate (Vitamin B1), Riboflavin (Vitamin B2), Folic Acid, Ascorbic Acid), Water, High Fructose Corn Syrup Or Liquid Sucrose, Yeast, Vegetable Oil (Canola And/Or Soy) Or Soybean And/Or Cottonseed Oil, May Contain 2% Or Less Of The Following: Salt, (Vital) Wheat Gluten, Soy Flour, Corn Starch, Yeast Nutrient (May Contain One Or More Of The Following: Ammonium Sulfate, Monocalcium Phosphate, Calcium Sulfate, Calcium Carbonate) Dough Conditioners (May Contain One Or More Of The Following: Wheat Starch, Microcrystalline Cellulose, Sorbitol, Sodium Chloride, Magnesium Stearate, Distilled Monoglycerides, Sodium Stearoyl Lactylate, Ascorbic Acid, Azodicarbonamide, Mono- And Diglycerides, Ethoxylated Mono- And Diglycerides, Calcium Peroxide, Calcium Stearoyl-2-Lactylate, Dateem, L-Cysteine), Enzymes, Preservatives (Calcium Propionate And/Or Sorbic Acid), Vinegar, Sesame Seeds. Does not contain animal ingredients. Contains: Wheat and Soy.

Human Diet

- The diet for humankind has changed more in the last 50 years than it has in the previous

50,000!!!!!!!!!!!!!!!!!!!!!!



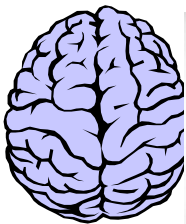
Omega 3 fatty acids

- In countries where people eat more fish, such as Scandinavian and East Asian nations: **lower rates of depression**
- Research on omega 3s and bipolar
- Found in the oil of fish such as salmon, herring, sardines, trout, tuna
- Flaxseed, walnuts and pumpkin seeds
- Brain is composed of over 60% fat

Symptoms indicate need for higher levels of omega 3 fatty acids

- Depression
- Cardiovascular Disease
- Type 2 Diabetes
- Fatigue
- Dry, itchy skin
- Brittle hair and nails
- Inability to concentrate
- Joint pain

Brain Food



Omega 3 fats

- A diet *too low* in fat can lead to anxiety and depression
- Fat - last nutrient to leave stomach – helps with blood sugar control
- Must balance omega 3 and omega 6
- Good omega 3 fats: fatty fish, walnuts, flaxseeds, soybeans, halibut, tofu

Omega 6 and Omega 3

- Current consumption of omega 6 has doubled from what it was in 1940.
- We eat too many omega 6 foods: safflower, sunflower, soybean, corn oil
- By comparison, our intake of omega 3 fatty acids has shrunk to one sixth of 1850 levels.



EPA & DHA

- Two omega-3 fatty acids – eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA)
- AHA: healthy people should get about 1 gram per day of EPA and DHA
- Doses as high as 10 grams per day for bipolar (under care of health care provider)
- Fish oil supplements – quality matters

Mood improves on Low-Fat Diet

- Recent research in the Journal of the American Medical Association
- Dieters trying to lose weight assigned to low-fat, high-carbohydrate diet or a high-fat, very-low-carbohydrate diet
- One year – overall weight loss 30.2 pounds in both groups
- Mood improved only in those on low-fat diet

Complex Carbohydrates

- Whole grains, fruit, vegetables
- Absorption of tryptophan (converts to serotonin) in the brain enhanced by eating carbohydrate-containing foods
- Carbohydrate cravings explained as a subconscious drive to increase serotonin
- Carbs that are slow releasing can help the absorption of tryptophan across the blood brain barrier without creating a rebound hypoglycemic dip

Control Blood sugar highs/lows

- Foods and meals with low “GI”
- Glycemic Index measure of how quickly different types of food are broken down and raise blood sugar levels
- Avoid highs and lows of mood and energy associated with fluctuating blood sugar levels by choosing foods that are digested slowly
- <http://www.glycemicindex.com>

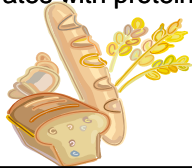
Avoid

- Foods that raise blood sugar quickly and subsequently cause a drop in energy and mood level:
- “white starches” like white bread, pasta, rice, cookies, cake
- Processed starches devoid of bran and germ



Choose

- Foods that raise blood sugar slowly and for the long haul
- Whole grain breads and cereals
- Oats and rye
- Combining carbohydrates with protein and fat
- SLOW carbs, not no carbs



Protein

- Protein made up of fragments called amino acids
- Tryptophan is an amino acid that can have a direct effect on levels of serotonin
- Eating foods high in tryptophan can improve mood as tryptophan is converted by the body to serotonin

Protein

- Tryptophan found in foods with amino acids – protein foods
- Turkey, chicken, eggs, tuna, soybeans, beef, lamb, salmon, snapper, beans/legumes
- Tryptophan absorbed more quickly into the brain after eating a carbohydrate snack



Steady blood sugar

- Eat at consistent times during the day
- Breakfast!
- Eat every 4 hours or so
- Combine protein, fiber, small amount of healthy fat
- Fruit/Vegetable at every meal
- Hydrate!

Portion plate



Vitamins and minerals

- Essential for emotional and mental health
- Vitamin B6, vitamin C, folic acid and zinc are all co-factor nutrients for the tryptophan to serotonin conversion
- B6: fish, poultry, whole grains, avocado, banana, sunflower seeds, walnuts, watercress
- Vitamin C in citrus fruits, bell peppers, strawberries, melons, broccoli

Vitamins and minerals

- Folic acid: green leafy vegetables, dried beans, poultry, oranges, nuts, fortified cereals
- Zinc: lean meats, eggs, seafood, whole grains, low fat milk products
- Vitamin D
- Multivitamin/mineral supplement - take with meals!

Functional Foods for LOVE!

- Aphrodisiacs do their job by stimulating the senses of sight, smell, taste and touch
- Do they really work?
- Yes, but not in the way you may think they do!



Aphrodisiacs

- Despite long-standing literary and popular interest in internal aphrodisiacs, almost no scientific studies of them have been made
- Limited to occasional tests of drugs or hormones for the cure of male impotence (sorry women!)

Aphrodisiac Foods

- Scientifically no food has been found to directly or chemically stimulate the sex organs in humans
- Most aphrodisiacs throughout history have fallen into one of several categories



Aphrodisiac Foods

- **Temperature** – foods that create warmth and moisture – think chili, curry – have been used throughout history to stimulate or arouse “heated” passion
- **Striking Resemblance Hypothesis** – think oysters, bananas, carrots, asparagus



Aphrodisiac Foods

- **Reproduction Power** – Eggs, suggestive of fertility, have been thought to increase sexual desire and potency
- **Exotic-Erotic** – throughout history vegetables such as asparagus and artichokes were thought to stimulate desire and also increase sperm count. Shapely fruits like pears and figs were compared to seeds of fertility



Chocolate



- King of the natural aphrodisiacs, contains over 300 known chemicals, including PEA (phenylethylamine) the “love chemical” – releases dopamine in the pleasure center of the brain
- Tryptophan – precursor to serotonin – promotes sense of well being
- Theobromine – a weak stimulant
- Melts at temperature of the human mouth!

Oysters



- Long been associated with eroticism due to texture and appearance
- Very high zinc content
- Both delayed sexual development and impotence can be caused by zinc deficiency
- Only works on those who are zinc deficient!

Asparagus



- In 19th century France, bridegrooms were served 3 courses of the sexy spears at their prenuptial dinners
- Great source of potassium, fiber, vitamin B 6, vitamins A & C and thiamin and folic acid.
- Folic acid boosts histamine production necessary for completion of the sex act!

Almonds

- Through antiquity, almonds regarded as fertility symbol
- Scientists say they provide high doses of vitamin E, magnesium and even fiber
- Try some almond butter on your toast or sprinkle almonds in your salad or yogurt

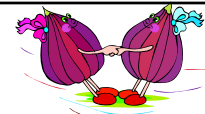


Bananas

- Obviously falls under the Striking Resemblance Hypothesis!
- Loaded with potassium, magnesium and B vitamins necessary for sex hormone production



Figs



- Steeped in history and one of the oldest fruits known
- Open fig is believed to emulate the female sex organs
- Ancient Greeks held them as sacred and associated them with love and fertility
- High in fructose to give lots of energy!

Honey



- Many medicines in Egyptian times were based on honey including cures for impotence!
- Lovers on their “honeymoon” drank mead (fermented drink made with honey) and it was thought to “sweeten” the marriage
- Sweet, sticky honey is a great source of boron, a trace mineral that helps body use and metabolize estrogen
- Studies show can also enhance testosterone levels in the blood

Recent Aphrodisiac Food Studies

- Studies at Smell and Taste Treatment and Research Foundation in Chicago
- Subjects exposed to food and aromas and their level of arousal determined by measuring blood flow to genitalia
- Men most aroused by pumpkin pie, particularly when combined with lavender!

Recent Aphrodisiac Food Studies

- Other aphrodisiac scents for men included:
- Doughnuts, especially when combined with lavender or pumpkin pie!
- Oranges
- Black licorice
- Buttered popcorn
- Cheese pizza
- Vanilla and strawberries
- Cinnamon buns



Recent Aphrodisiac Food Studies

- Aromas that acted as aphrodisiacs for women included:
- Baby powder
- Pumpkin pie and lavender
- Licorice
- Combination of candy and cucumbers
- Chocolate (they needed a study for that?)
- Banana nut bread



Recent Aphrodisiac Food Studies

- Oddly enough, female arousal was actually **decreased** by scent of
- Men's cologne
- Barbequed meats
- Cherries



Exercise

- Not only is it good for your health, but it's also good for your sex life.
- According to Discovery Health, the aphrodisiac qualities of exercise are associated with the endorphins that are released in the brain with vigorous activity -- like the runner's high.
- Other aphrodisiac affects of exercise come from exercises that increase blood flow to the genitals.

Supplements to enhance mood

- St. John's Wort – effective in mild to moderate depression
- Several meta-analysis show it is more effective than placebo and similarly effective to standard antidepressants for mild to moderate depression
- Dosages up to 900 mg per day
- Can interact with SSRI, oral contraceptive and hormones

SAMe

- **S-Adenosyl-Methionine: naturally occurring in body**
- **Concentrated in liver and brain**
- **Strong evidence that it is effective and well tolerated as an anti-depressant**
- **Used for decades in Europe**
- **Meta-analysis showed it was superior to placebo and comparable to standard anti-depressants**
- **Not for use with bipolar disorder**

5 - HTP

- 5-Hydroxytryptophan
- Made from amino acid L-tryptophan found in dairy, eggs, poultry, red meat, soybeans, and nuts
- L-tryptophan converted to 5-Hydroxytryptophan converted to serotonin
- Preliminary studies show it is more effective than placebo for mild to moderate depression

Supplements

- Check with health care provider
- Can interact with other medications
- Must take correct dose to get desired effect



Marketing Mood Enhancers

- Drinks that “boost alertness”, etc.
- Teas for calmness
- Could we soon see “tranquilizer treats” or “anti-psychotic snacks?”



Health by Addition

- Lean protein: salmon, turkey, chicken, soybeans, whey, cottage cheese, low-fat cheese, omega-3 rich eggs
- Whole fruits and vegetables - choose at least 1-2 at each meal
- Whole grains: oats, barley, wheat, corn, rye, quinoa, brown rice
- Beans/lentils, sweet potato

Health by Addition

- Healthy fats: extra virgin olive oil, nuts, seeds, avocado, hummus
- Herbs/spices – anti inflammatory
- Small amounts of sweets –dark chocolate
- Water, Green/black tea, herbal tea, small amounts of wine can “arouse” but much more than that will have reverse effect

Let's get
Cooking!

Remember: “Healthy
Body, Healthy Mind!”