

How to Support Your Figure Skater

Nutritional and Emotional Support

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Why is Nutrition Important?

- Widely overlooked aspect in training athletes
- What they eat on a daily basis affects:
- Growth and development
- Immune system
- Quality of workout
- Recovery from workout and competition:
 - *Ability of tissue to adapt, grow, and repair*
 - *Ability to store and utilize energy stores for endurance and power*
- **GOAL: To optimize nutrition for healthy participation, performance, and to prevent injury, while being mindful of eating disorders. More important to emphasize eating enough than being too restrictive!**

Growth and Development

- Until they reach adult height, normal growth and development will only occur with **adequate caloric (energy) intake, macronutrients and micronutrients**
- Female Recommendations for Daily Caloric Intake
 - Age 4-6=1800 kcal/day
 - Age 7-10=2000 kcal/day
 - Age 11-14=2200 kcal/day
 - Age 15-18=2200 kcal/day
- Macronutrients daily breakdown for female athletes:
 - 60% Carbohydrates (330g), 16% Protein (88g), 24% Fat (59 g)
- Micronutrients
 - Calcium (1300 mg/day), Vit D (600 IU/day) indoor activity concern, Iron (8-15 mg/day)
 - Vitamins A, D, E, K (fat soluble) C, and B Vitamins

Carbohydrates (60% or 330 grams/day)

- Important fuel source for energy for high intensity activities
- Need to choose a variety of wholesome rather than refined carbohydrates

Carbohydrate Choices:

- MORE: Whole grains/rice/pasta, vegetables, lentils, fruit, milk, yogurt, oatmeal (more nutrient dense)
- LESS: Sugar, honey/jelly, syrup, soda, candy, chocolate, pastry, cake, chips (empty calories)
- Try to avoid or at least minimize processed, canned, packaged food (high in sodium and sugar) IDEA of “crowding out” these foods, works best

Protein (16% or 88 grams/day)

- Provides the building blocks for muscle
 - Growth, maintenance, repair
- Keeps immune system healthy

Protein Choices

- MORE: (High in Omega 3/monounsaturated fats); Fish and seafood, eggs, lean meats, legumes, beans, low fat dairy, tofu, and nuts
- LESS: (High in calories, saturated and trans fats); Hamburgers, hot dogs, pizza, deep fried meats

Fat (24% or 59 g/day)

- Supplies energy to the body
- Needed for structure of cells, **hormone production** (important in teen years)
- Transports fat soluble Vit A, D, E, and K through the body

Fat Choices

- MORE: (Unsaturated fats), fish, olive oil, vegetable oil, nuts/seeds, avocado, peanut-butter, soybeans, almond milk
- LESS: (Saturated fats) No more than 10%; red meat, coconut oil, cheese, butter
- AVOID: (Trans fats) Fried foods, candy bars, margarine, packaged snack foods

Calcium (1300 mg/day)

- Important for growth, bone and tissue repair, muscle contraction, nerve conduction, and blood clotting
- Need Vit D for absorption of calcium
- Inadequate Vit D and calcium increases the risk of stress fractures and low bone mineral density

Food Sources: Milk (250 mg), yogurt (300mg), cheese, broccoli, spinach, dark leafy green vegetables, fortified grain products, tofu

Vitamin D (600 IU/day)

- Necessary for bone health, reduces risk of stress fractures, osteoporosis
- Involved in absorption and regulation of calcium

Environmental source: Sunlight (how much is enough?...Depends on skin type and geographical location; Fair =15 min, Medium=1 hour, Dark = 2 hours in summer in Nantucket produces 1000 IU. But...in winter in Nantucket 0 IU. **Important to supplement and /or get from food sources in the winter!**

Food Sources: Egg (20 IU), salmon (360 IU), sardines (250 IU), Tuna (200 IU), fortified milk

Supplement: Vitamin D3

Iron (8-15 mg/day)

- Important for oxygen delivery to body tissues
- Required for enzymes involved in energy production
- Ages 9-13 = 8 mg/day; Ages 14-18 =15 mg/day
- More iron is needed in teen years to support growth, increases in blood volume, lean muscle mass, and menstruation
- More iron needed for athletes because iron loss through, urine, feces, sweat

Food Sources: Eggs, leafy green vegetables (spinach, swiss chard), fortified whole grains, lean meat (beef, lamb, chicken), nuts, tofu, oysters/mussels/clams

To enhance absorption, best to combine with Vit C rich foods

Other Vitamins

- **Vitamin A**- Eye health and cells; *carrots, kale, sweet potatoes*
- **Vitamin E**- Antioxidant; *avocados, green leafy vegetables, nuts*
- **Vitamin K**- Clotting and making protein; *kale, spinach, mustard greens*
- **Vitamin C**- 600-1000 mg/day; helps absorb iron, heals wounds/tissue repair, protects from bruising, boosts immune system protecting from illness and infection; citrus, pineapple, kiwi, strawberries
- **Vitamin B/folate/biotin**- helps “unlock” energy in our food and building/repair of muscle tissue:*meat/liver/poultry/pork/shellfish/eggs, milk/yogurt, vegetables-*
-(female athletes are often deficient in B2 (riboflavin), B6 (pyridoxine), B12 and folate-B complex because of malabsorption, supplementation for optimal health).

Recovery Nutrition

- Eat immediately after workout (within 30-60 minutes)
- Eating carbohydrate and protein right after workout/even will:
 - Restore fuel in muscle (glycogen)
 - Increase synthesis of muscle protein (repair and rebuild)
- Quick Nutritious Recovery Foods
 - Low fat chocolate milk
 - Fruit smoothie with protein powder
 - Low fat yogurt with granola
 - Peanut butter and banana
 - Apples with low fat cheese

Hydration/Fluid intake

How much water is enough?

- Depends on the physical activity, environmental factors
- Monitor urine color (should be a light straw color)
- GENERAL GUIDELINES:
 - Drink small amounts throughout the day rather than large amounts quickly
 - 8-16 oz. Before activity (1-2 hours)
 - 5-10 oz. During activity (every 20 minutes)
 - 24 oz. Post Activity (within 2 hours)

Supporting Emotionally

Eating disorder risk factors:

- In a sport that emphasizes appearance
- Low self-esteem
- Family dysfunction
- Chronic dieting
- Peer, family, cultural pressures to be thin
- Traumatic life experience
- Coaches who focus primarily on success and performance rather than on the athlete as a whole person
- At risk for Female Athlete Triad: Amenorrhea, Osteoporosis, Eating Disorder

How to Protect from Eating Disorders:

- Positive, person oriented coaching style, rather than negative performance oriented
- Teammate and community social support with healthy attitudes towards body size and shape.
- Coaches and parents who emphasize factors that contribute to personal success, i.e., motivation and enthusiasm rather than body weight or shape.
- Coaches and parents who talk to their girls about the changes that happen normally in the female body.

Help to form a Positive Body Image

- Focus on love of self, sport, ability to do activities that one loves vs. appearance
- How do we inspire to do this?
 - Bring attention to positive role models in sports who have very unique and varied body types
 - Emphasis on finding beauty in many forms.
 - Look at the innate valuable qualities of your athlete (not related to competition, size, shape)
 - Surrounding her with a web of support of those who love her for simply being her.
 - Have her practice receiving evidence that she is beautiful.

For Menstruating Girls:

Teach her how to use her cycle to her advantage and be aware of the fluctuations in her body's nutritional needs:

- Heavy menstruation days- Restorative and supportive (family/friends)
- Before ovulation-Late Week 1/week 2-best time for high energy, "masculine energy", competition, creativity, increase training/intensity, reach her highest potential
- After ovulation- Week 3 and early week 4- best time for inner work, focus on training details, expansion, growth
- Week 4-Restoration

Menstruation and Nutrition:

Before ovulation when estrogen is high: Her body uses more fat and less protein and thus an endurance activity would be favored.

After ovulation when progesterone is on the rise: Her body uses more protein and thus needs more protein intake.

Healthy Lifestyle Choices

- Regular daily activity, getting outside
- Enhancing sleep strategies
 - Electronic curfew at least 1 hour before bedtime (blue light disturbs brain activity)
 - Deep breathing/relaxation, stretching
 - Establish and maintain a regular nighttime bed routine
- Stress management
 - Get homework done at reasonable time, manage her time wisely
 - Relaxation (reading, playing a game, listening to music)
- Social activities and communication with her friends
- Eating enough nutrient dense healthy foods

Event Recovery

Emotionally support:

- Did she meet, exceed, or fail to meet her goal?
- What did she enjoy most?
- What did she learn about herself?
- What surprised her about the event?
- What will she change about her training for future events?
- CELEBRATE! Her accomplishments and others, Gratitude: for the opportunity to compete, for her team, for her body and mind's ability

Physically support: Adequate rest, nutrient dense recovery meals

PLAN ahead! Sample Daily Menu

Breakfast

- 1 cup of granola
- ½ banana
- ½ cup skim milk
- ½ cup orange juice
- smoothie with kale, spinach, blueberries, yogurt/almond milk, peanut butter

Morning Snack

- 2 rice cakes with almond butter
- 1 cup of honeydew melon

Lunch

- 1 cup of tomato soup
- 2 whole wheat crackers
- Turkey (1 oz) sandwich with whole grain bread, mayo (1 tsp)
- 1 apple

Afternoon Snack

- 1 orange
- 1 whole grain bagel with cream cheese

Dinner

- 4oz. grass fed beef/chicken/salmon
- 1 baked sweet potato with butter
- ¾ cup of broccoli
- 1 cup skim milk
- 1 piece of gingerbread

Evening Snack

- 1 cup skim milk
- 1 large oatmeal cookie

Howard Schatz's Images Of Female Athletes Are Unbelievable

The Huffington Post | By Nina Bahadur

The images below show an incredible variety of women, ranging in weight, height, race and proportion.

What they all have in common is that they are professional athletes at their physical peak.



