

# Simplified GA-1 Diet

## Medical Food (Formula)

- Medical food provides protein that is lysine-free and fortified with arginine.
- Medical food takes the place of high protein foods such as meat and dairy products.

## Food

- The diet includes foods that are low in protein/lysine.
- Count intake using the guidelines below.
- Recommended intake \_\_\_\_\_

## Low Protein Foods - No Limit

### Fruits

- Most are low in protein – no limit

Examples (listed by lysine content from low to high):

- Apples/applesauce, blueberries, plums, nectarines, pears, honeydew, grapefruit, fruit cocktail, pineapple, strawberries, grapes, figs, cantaloupe, cherries, peaches, raspberries, plantains, mango, oranges, bananas, and dates
- Dried cranberries, prunes, and apples

### Vegetables

- Most are low in protein – no limit

Examples (listed by lysine content from low to high):

- Spaghetti squash, iceberg lettuce, cucumber, jicama, celery, tomatoes, onions, carrots, butternut squash, zucchini/summer squash, bell peppers, eggplant, acorn squash, cabbage, cassava, parsnips, beets, romaine lettuce, and green beans

### Specialty Low Protein Foods

- Most are low in protein\*
- Examples: rice milk, almond milk, low protein pasta, rice, bread, bagel, cereal, broth, cookies, peanut butter substitute

\*Discuss with dietitian about where to order and which to count

### Other Foods

- Contain sugar and fat, but no protein, add extra calories
  - Soft drinks such as lemonade, soda, iced tea
  - Fats – butter, margarine, vegetable oil, mayonnaise, salad dressings (if label indicates zero protein)
  - Other – nondairy creamer, coconut milk yogurt and ice cream; jelly, jam, sugar, maple syrup, popsicle, Italian ice, sorbet, marshmallow, hard candy



## **Medium Protein Foods – Need to Count**

These vegetables/fruits are higher in protein and must be counted:

**Fruits: Apricots, avocado and watermelon\***

**Vegetables: Sweet potato, mushrooms, asparagus, brussel sprouts, broccoli, spinach (raw or cooked), kale (raw or cooked), white potatoes (all forms), corn, sundried tomatoes, green peas, sugar snap peas\* and cauliflower\***

Dried fruits (e.g. dried apricots, raisins, coconut, bananas, cherries)  
Watermelon, cauliflower and sugar snap peas have a high lysine content. Use in moderation.

## **Bread and Cereal Products**

- Read food labels- look for the lowest in protein

Examples:

- Breakfast foods: toast, bagel, English muffin, waffle, pancake, cereal, small muffin, donut
- Lunch and dinner foods: bread, pita, roll, tortilla, rice, pasta
- Snack foods: potato chips, corn chips, rice cakes, Goldfish, crackers, popcorn, cookies

## **High Protein Foods (Avoid/Limit)**

- These foods are high in protein and lysine.
  - Meat (All types- beef, lamb, pork, chicken, turkey, fish, etc.)
  - Eggs
  - Dairy products (cheese, yogurt, ice cream)
  - Nuts and seeds (including nut/seed butters)
  - Soy protein (tofu tempeh, many vegetarian burgers)
  - Legumes (kidney beans, garbanzos, lentils, split peas, hummus)

## **Boston Children's Hospital Metabolism Program**

Ann Wessel, MS, RD (617-355-6515)

Leslie Martell, MS, RD (617-355-7362)

Krista Viau, PhD, RD (617-355-6516)

