

GRANT SUMMARY: LOCAL HEALTHY DIET PROJECT

A group of individuals were identified and asked to participate in the development of a Western Lake Superior Healthy Diet that would address growing, health and cultural issues. The “task force” of doctors, nutritionist and dietitians along with expertise with Native American medical issues including diabetes and heart disease was formalized. The group was given the task to “*answer some broad questions that will likely lead to subsequent nutritional research on Western Lake Superior regional foods:*

1. *What does the Western Lake Superior Region (WLSR) consume assuming the average SAD diet pattern?*
2. *What would be an optimal diet pattern for WLSR that focuses as much as possible on local, seasonally available foods?*
3. *How would a regional diet particularly benefit the native people of the region in addressing health problems (e.g. diabetes) that particularly trouble indigenous populations?” Healthy Lives Healthy Grant*

The process and accomplishments in answering these questions is defined below...

TIMELINE

September 4th Initial contact was started with potential “task force” members. The list included

1. Sally Bujold (physiologist),
2. Peggy Heistad-Harri (Registered Dietitian, MEd, LD, CDE)
3. Gayle Nikolai (Nutritionist/Fond du Lac band member)
4. Emily Onello (Physician)
5. Nancy Sudak (Physician)
6. Sarah Nelson (Physician)
7. David Abazs (Farmer, PI LAFS Assessment, Facilitator)

September 30th the initial meeting was held at 7 p.m. at the Friends Meeting House.

- Present; Peggy, Gayle, Sarah, Emily, Nancy and David
- Agenda; Welcome, Introductions, Project Overview, Q & A, Plan of Action was established.

October 13th was held at 7 p.m. at Sarah Nelson’s Home.

- Present; Peggy, Sarah, Emily, and Nancy
- Agenda; Diet development

October 20th was held at 7 p.m. at Nancy Sudak’s Home.

- Present; Sarah, Emily, Nancy and David
- Agenda; Diet work

November 10th was held at 7 p.m. at Nancy Sudak's Home.

- Present; Sarah, Emily, Nancy and David
- Agenda – Finalize data/diet/assumptions/references etc.

The diet we came up with was based on the USDA guidelines. The DASH eating plan is similar - a little higher in protein and lower in fat. Quite a bit lower in cholesterol (136 mg compared to 230 mgs) and a bit higher in fiber. Where they differ is in the LA to ALA ratio - DASH is 14 to 2.2(6.3 to 1) and USDA is 18 to 1.7(10.5 to 1). I know we wanted our ratio to be even lower. The Dash diet also put legumes, nuts and seeds in a separate category from meat, poultry and fish. Their recommendations for the L/N/S group is 4-5 servings per week and a serving is 1 1/2 to 2 ounce equivalents in the USDA diet (1/2 cup of beans-cooked- ,1/3 cup or 1 1/2 ounce of nuts, 2 tablespoons of nut butter, 2 tablespoons or 1/2 ounce seeds. The Dash diet limits fats and oils to 2-3 teaspoons per day. The Dash diet gives a range of 2-3 cups of dairy and has many less discretionary calories - about 2 teaspoons of added sugar per day.

All task force members agreed that the most significant aspect of the WLS Healthy Diet is the total reduction of calories as compared to the Standard American Diet (SAD) This fact alone, would provide many benefits for health. The other aspect of the new diet is that it contains no additional (added) calories of sugar. This recommendation as well, will help reduce suffering from health issues throughout our region.

The task force worked out great, developing a healthy diet that can be 100% grown in our limited growing region. This diet provides the basis of a statistical comparison of building a local food system using the Standard American Diet (SAD) and the new regional diet. I am heading up the development of a cookbook this winter, based on this new diet, goals to “brand” the region and find a home for lots of recipe’s floating around.

TASK FORCE (left to right)

Emily Onello

~ Family Physician M.D.

Peggy Hiestand-Harri

~ Med, RD, LD, CDE

Sarah Nelson

~ Family Physician M.D.

Nancy Sudak

~ Holistic Family
Physician M.D.



This group of experts finalized the WLS Healthy Diet depicted here!

DIET BASICS FOR 2000 CALORIE DIET

FOOD GROUP

Grains - 6 ounce equivalents

1 ounce equivalent equal to 1 slice bread, 1/2 cup cooked rice, pasta or other grain, and 1 cup dry cereal

Vegetables - 2 1/2 cups

1 cup for most vegetables, 2 cups lettuce and leafy greens equals 1 cup.

Fruits - 2 cups

1 cup for most fruits and juice, 1/2 cup of dried fruit

Meat/Fish/Poultry/Egg - 3 1/2 ounce equivalents

1 ounce equivalent equal to 1 ounce of meat, fish, poultry(lean cuts and without skin) or 1 large egg

Legumes - 2 ounce equivalent

1 ounce equivalent equal to 1/4 cup cooked beans, lentils or peas. 2 tablespoons hummus

Nuts and Seeds - 2 ounce equivalent

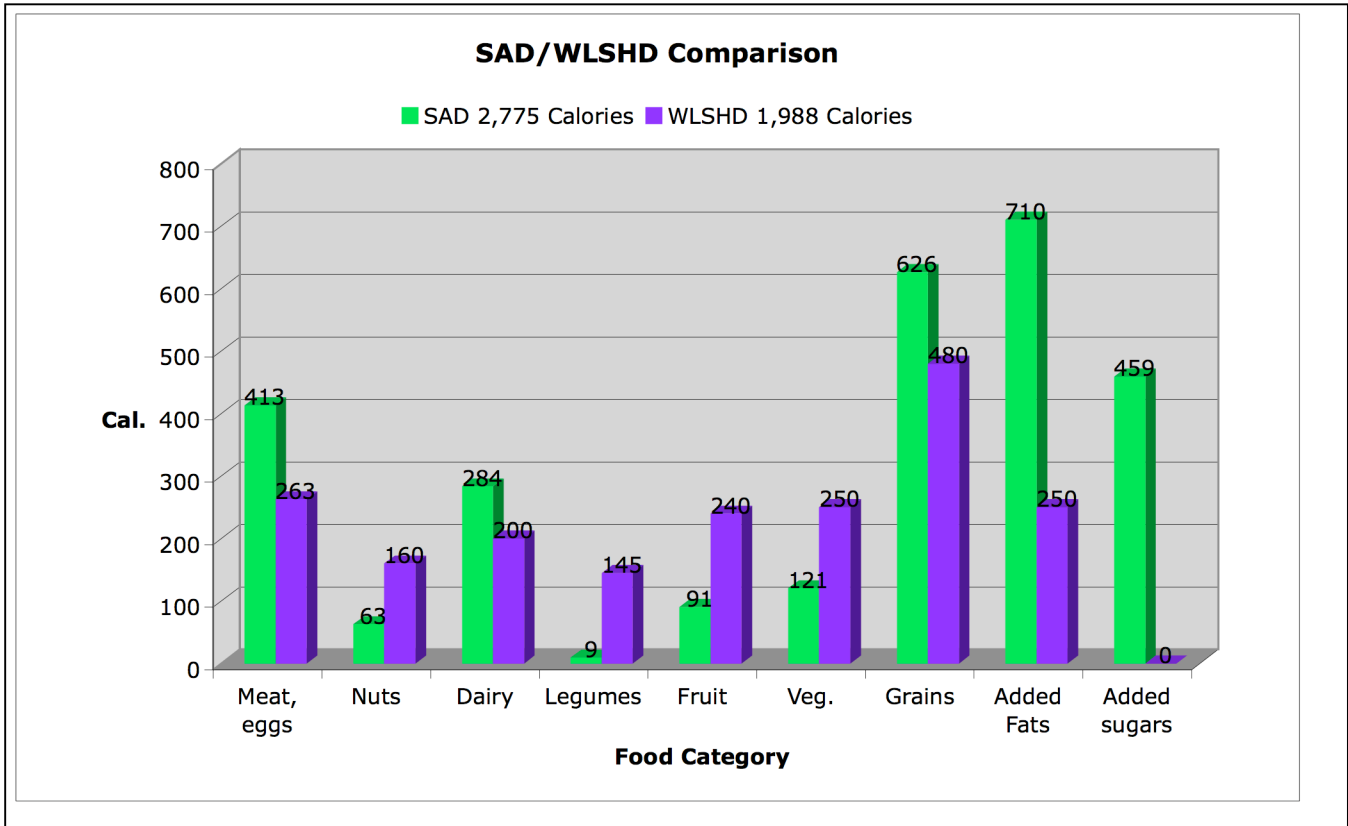
1 ounce equivalent equal to 1/2 ounce of seeds or nuts. 1 tablespoon of nut or seed butter

Fats and Oils - 6 teaspoons

Dairy - 2 cup equivalents

1 cup equivalent equal to 1 cup milk or yogurt, 2 cups cottage cheese, 1/2 cup ricotta cheese, 1 1/2 ounces hard cheese, 1/3 cup shredded cheese.

Discretionary calories - None



HEALTHY DIET ASSUMPTIONS/SPECIAL CONSIDERATIONS

1 - Calorie requirements are based on personal age, weight, and activity level. For simplification, we have taken an average of the current caloric recommendations by the USDA in their Food Pyramid Guide of 2000 calories per day.

2 - Although dairy products are included as part of our proposed healthy diet, not all individuals tolerate dairy products or choose to consume them. For those opting out of dairy altogether, protein and calcium requirements may be reconciled from other foods.

3 - Some individuals will also choose various degrees of vegetarianism. Protein requirements can be met through intake of other categories, depending on how restrictive the individual’s dietary choices are. For vegans, protein requirements must largely be met through grains, legumes, nuts, and seeds.

4 - There is considerable overlap of macronutrient content among the food categories delineated. For example, fatty acids may be found in fats and oils, nuts and seeds, meat/fish/poultry/eggs, dairy products that are not fat free, and even in some legumes and grains. However, we have predominantly considered fat intake within the *Fats and Oils* and *Nuts and Seeds* categories. Though protein is available in

the *Meat/Fish/Poultry/Egg* category, bioavailable protein is also available within dairy products, legumes, grains, nuts, and seeds.

5 - Where meat and dairy are consumed in our proposed healthy diet, the animals are assumed to be sustainably raised. For example, cows are presumed to be grass fed, hormone- and antibiotic-free, and living in unstressed conditions. Chickens are likewise presumed to be cage-free and fed a natural diet, ideally including flaxseeds. End products of these conditions will result in higher omega three fatty acid content and slightly reduced fat content overall.

6 - Where fish is consumed, it is advisable to consult the Department of Natural Resources Fish Consumption Advisories so that fish with the lowest content of contaminants such as mercury will be chosen.

7 - Although the USDA Food Pyramid assumes various degrees of food refinement, our healthy diet encourages a greater degree of consumption of whole grains (such as whole cooked grains), rather than using refined flour products.

8 - In the local healthy diet, limited sources of fatty acids are available. Though olive oil is highly consumed in the Mediterranean diet, canola oil is an acceptable substitute for its omega 9 content and the added benefit of omega 3 fatty acids. Products made from flax and hemp seeds in the local healthy diet are encouraged for their robust availability and favorable omega 6: omega 3 ratios. Butter (a solid fat) should continue to be eaten in moderation in either diet.

HEALTH ISSUES AFFECTED BY ADOPTING THE NEW WLS HEALTHY DIET

Health statistics for our region;

A. Bridge to Health Survey done in 1995, 2000 and 2005. 8 Northeastern MN counties and Douglas Co in Wisconsin. In 2005 53% of respondents overweight or obese - 34.7% overweight and 18.6% obese - determined by height and weight. Only 31% considered themselves overweight or obese. Most common medical problems were: back problems 26.5%, allergies 25.7%, Joint problems 23.4%, High blood pressure 23%, High cholesterol 21.4% Angina and heart disease 9.6%, and Diabetes 6.9%.

www.ghci.us/bridge-to-health-survey

B. Community Health Board (St. Louis, Cook Carlton, Lake) health data from 2007. Leading cause of death is by far heart disease and cancer and leading cause of hospitalizations is circulatory system problems in all the counties except St. Louis where it was respiratory diseases. www.communityhealthboard.org

WLS HEALTHY DIET REFERENCES

Fats that Heal, Fats that Kill. Erasmus, Udo. Alive Books, Canada, 1996

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Dietary Guidelines for Americans, 2005, US Dept of Health and Human Svcs, US Dept of Agriculture, accessed 10/09 from <http://www.cnpp.usda.gov/Publications/DietaryGuidelines/2005/2005DGPolicyDocument.pdf>

USDA Food Pyramid, accessed 10/09 from <http://www.mypyramid.gov/>

The Corinne T. Netzer Encyclopedia of Food Values, Netzer, Corinne T. Dell Publishing 1992

Bridge to Health Survey

Carlton, Cook, Lake and St. Louis Community Health Board. 2007 Health Indicators

Oldways Food Issues Think Tank, www.oldwayspt.org

Canada's Food Guide, www.hc-sc.gc.ca