

Source: U.S. Department of Agriculture, Economic Research Service,
 Food Consumption, Prices, and Expenditures,
 Food Availability(Per Capita) Data System;
 \<http://www.ers.usda.gov/data/foodconsumption/\>

Standard American Diet (SAD) 710cal/250cal ratio				Western Lake Superior Healthy Diet		
Consumption	#/per.	#/region	%	#/per.	#/region	%
Total, fat content only	84.5	40,550,967.3	99.7%	29.76	14,278,506.5	99.7%
Butter (product weight)	4.7	2,263,186.3	5.6%	1.66	796,896.4	5.6%
Margarine (product weight)	4.6	2,192,491.1	5.4%	1.61	772,003.7	5.4%
Lard (direct use)	1.7	800,524.0	2.0%	0.59	281,874.6	2.0%
Edible beef tallow (direct use)	3.9	1,861,396.8	4.6%	1.37	655,421.3	4.6%
Shortening	24.9	11,924,800.9	29.4%	8.75	4,198,872.6	29.4%
Salad and cooking oils	44.5	21,370,553.4	52.7%	15.68	7,524,841.1	52.7%
	Ratio Multiplier	0.3521126				
Butter (product weight)		Acres in Dairy Data			Acres in Dairy Data	
Lard (direct use)		Acres in Dairy Data			Acres in Dairy Data	
Edible beef tallow (direct use)		Acres in Dairy Data			Acres in Dairy Data	
Total, vegetable oil pounds:	9.6	gallons (74#/7.7)		3.4	gallons (26#/7.7)	
Margarine, shortening, salad & cooking oil by priority below						
Soybean Oil (48 gal/acre) ²²	55.61%	53,427.3 acres		x	x	x
Canola Oil (127 gal/acre) ²²	11.16%	4,052.4 acres		80.00%	10,206.6 acres	
Flax Seed Oil (51 gal/acre) ²²	x	x	x	8.00%	2,541.6 acres	
Hemp Seed Oil (39 gal/acre) ²²	x	x	x	1.00%	415.5 acres	
Sunflower Seed Oil(102 g/a) ²	1.72%	777.6 acres		11.00%	1,747.4 acres	
Corn (18 g/a) ²²	5.61%	14,372.8 acres		x	x	x
Olive Oil (129 gal/acre) ²²	1.95%	x	x	x	x	x
Coconut	3.59%	x	x	x	x	x
Cottonseed	2.26%	x	x	x	x	x
Lard	2.59%	x	x	x	x	x
Palm	7.50%	x	x	x	x	x
Palm kernel	2.24%	x	x	x	x	x
Peanut 2/	0.85%	x	x	x	x	x
Safflower	0.34%	x	x	x	x	x
Sesame	0.08%	x	x	x	x	x
Tallow, edible	4.50%	x	x	x	x	x
<u>%Oil/Plant Type - USDA</u> ⁶²	100.00%			100.00%		
Total Regional Acres Needed		74,082.8 acres			15,209.3 acres	

Western Lake Superior Healthy Diet was determined by a "task force" of doctors, dietitians, & nutritionist. LAFS Assessment of WLS, HFHLI Grant, Fall 2009

Note 1- Calculations example... Soybeans .5561*9.6 gal = 5.33856 gal/48 gal acre = .11122 acres per person

Now take this .11122 acres per/person x 479,856 (regional population) = 53,427.3

Note 2 - The % totals do not always equal 100 due to rounding issues

Note 3 - Some of the oil by-product includes a mash that is used as a livestock supplement

Note 4 - The oil selections for the new diet address both health issues and the crops ability to grow here.

Note 5 - The Butter, Lard and Edible beef tallow's direct use is included in the dairy and meat data sets.

Note 6 - These numbers include loss and waste reducing the total average actually consumed

Note 7 - A conversion rate of 7.7# per gallon was used to connect consumption to production numbers

Note 8 - The SAD acreage includes 74.1% of the oil used and the WLSHD includes 100% of the oil needed

Note 9 - 2% was added to the total to account for the acres needed to produce seeds & plants

Final Note - The 2008 Census Estimate of 479,856 was used as our population calculator.