

Eighty-Year Decline in Mineral Content of One Medium Apple

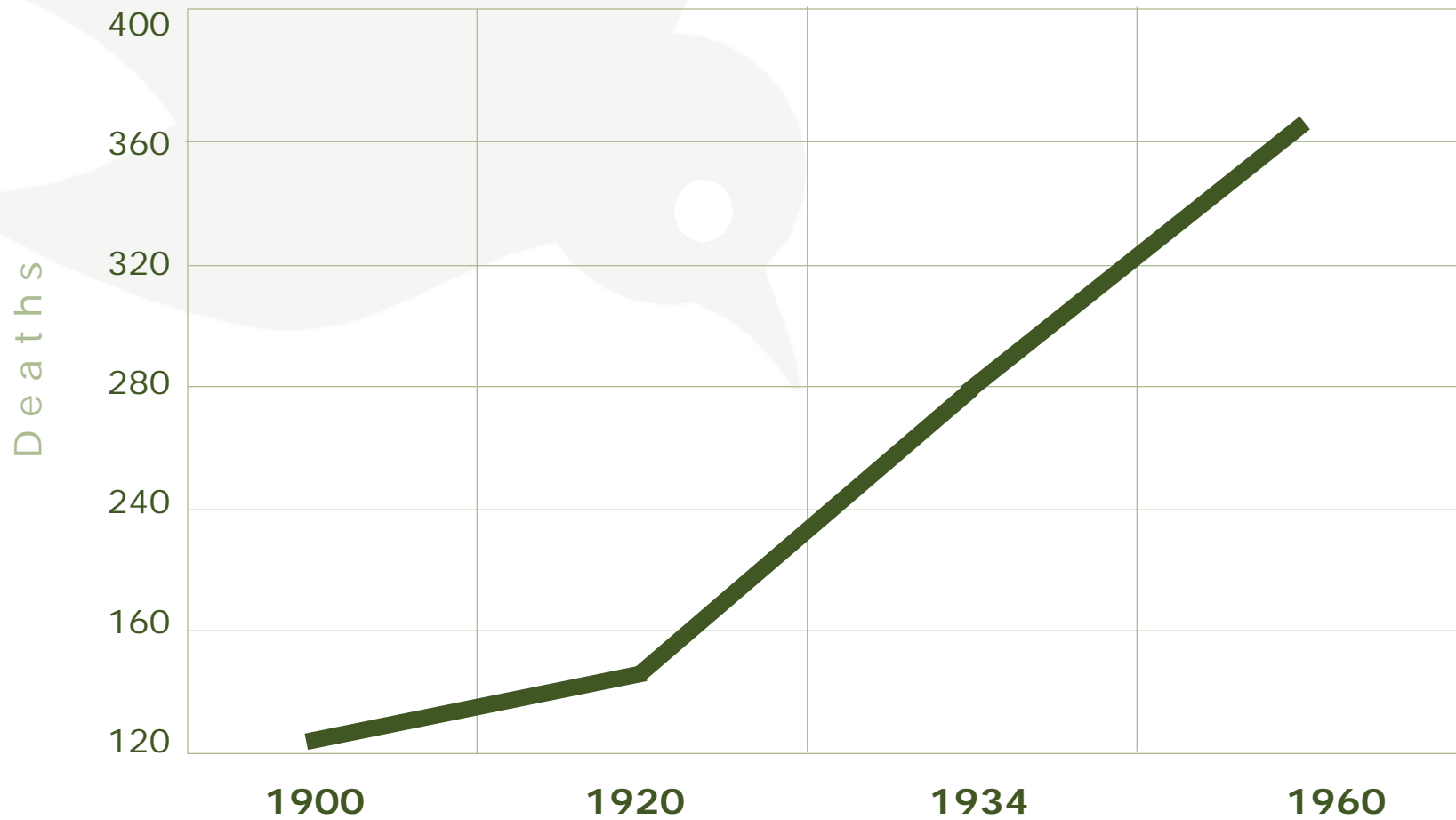
Raw, With Skin

Mineral	1914	1963	1992	%Change (1914-1992)
Calcium	13.5mg	7.0mg	7.0mg	-48.15
Phosphorus	45.2mg	10.0mg	7.0mg	-84.51
Iron	4.6mg	0.3mg	0.18mg	- 96.09
Potassium	117.0mg	110.0mg	115.0mg	-1.71
Magnesium	28.9mg	8.0mg	5.0mg	-82.70



Source: Lindlaar, 1914; USDA, 1963 and 1997

Deaths from Heart Disease Per 100,000 US Population 1900-1960



Source: Price, 1938; USDC, 1997

MINERALS GO DOWN, DISEASE GOES UP

Changes in the Rates of Selected Reported Chronic Diseases, 1980-1994

(per 100,000 member of the US Population)

Mineral	1980	1994	%Increase	Minerals Deficiencies Associates with Disease
Heart Conditions	75.40	89.47	18.67	Chromium, Copper, Magnesium, Potassium, Selenium
Chronic Bronchitis	36.10	56.30	55.98	Copper, Iodine, Iron, Magnesium, Selenium, Zinc
Asthma	31.20	58.48	87.44	Magnesium
Tinnitus	22.60	28.24	24.98	Calcium, Magnesium, Zinc
Bone Deformities	84.90	124.70	46.96	Calcium, Copper, Fluoride, Manesium

Changes in Nutrient Content of Beef and Chicken *Per 100 Grams*



Beef, Ground



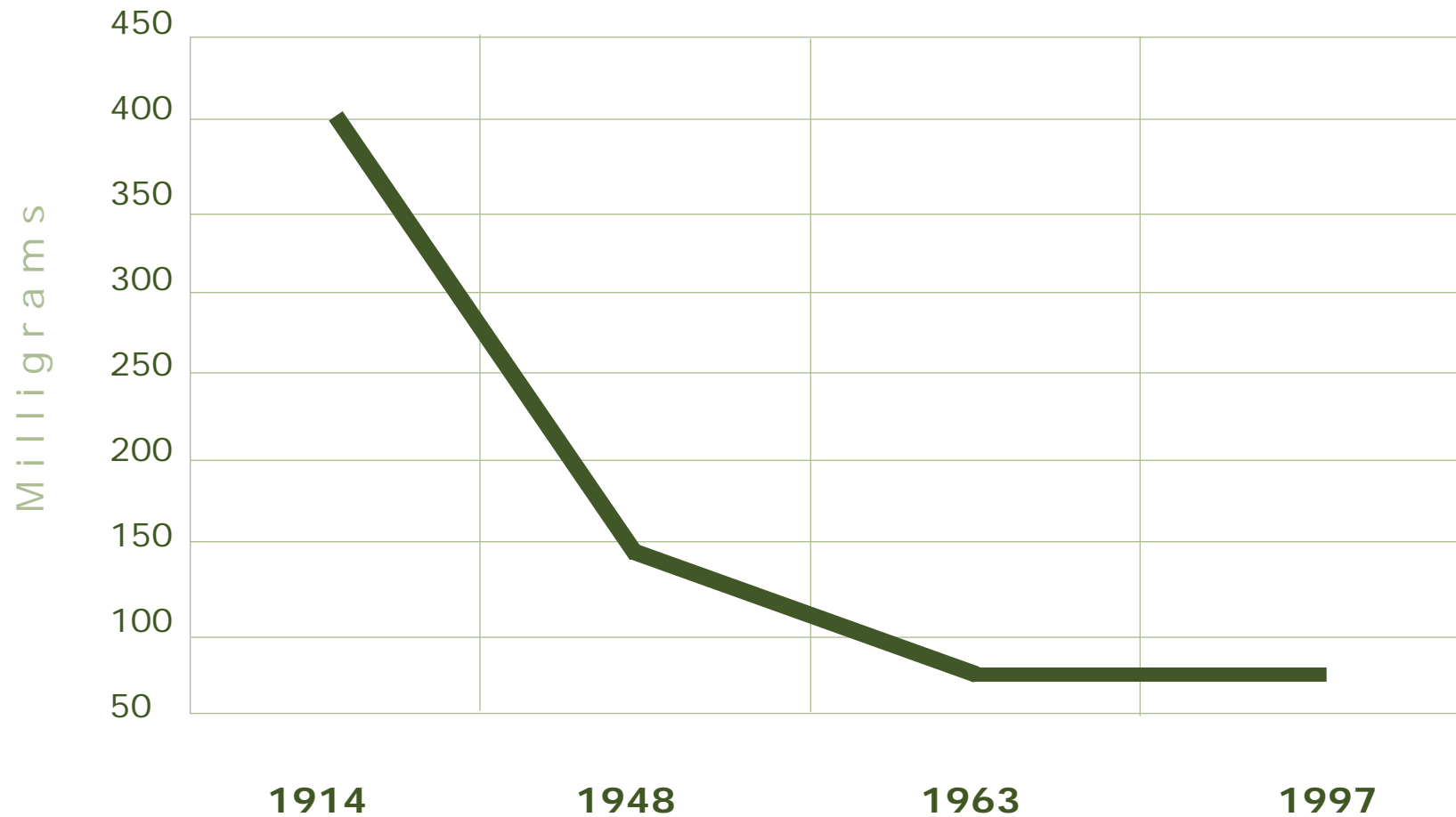
Chicken

Nutrient	1963	1992	%Change	1963	1992	%Change
Calcium	10.000mg	8.000mg	-20.00	12.000mg	10.000mg	-16.67
Iron	2.700mg	1.730mg	-35.93	1.300mg	1.030mg	-20.77
Magnesium	17.000mg	16.000mg	-5.88	23.000mg	23.000mg	0.00
Phosphorus	156.000mg	130.000mg	-16.67	203.000mg	198.000mg	-2.46
Potassium	236.000mg	228.000mg	-3.39	285.000mg	238.000mg	-16.49
Vitamin A	40.000IU	0.000	-100.00	150.000IU	45.000IU	-70.00
Thiamine	0.080mg	0.038mg	-52.50	0.100mg	0.069mg	-31.00
Riboflavin	0.160mg	0.151mg	-5.63	0.120mg	0.134mg	+11.67
Niacin	4.300mg	4.480mg	+4.19	7.700mg	7.870mg	+2.21

Source: USDA, 1963 and 1997

Average Mineral Content in Selected Vegetables, 1914 -1997

Sums of averages of calcium, magnesium and iron in cabbage, lettuce, tomatoes and spinach



Source: Lindlahr, 1914; Hamaker, 1982; U.S. Department of Agriculture, 1963 and 1997

Nutrients in Traditional Diets Compared to 20th Century Western Diets

Numbers represent percentage greater in traditional diets

	Calcium	Phosphorus	Magnesium	Iron	Fat-Soluble Vitamins
Eskimo	540%	500%	790%	150%	1000+ %
Swiss	370%	220%	250%	310%	1000+ %
Gaelics	210%	230%	130%	100%	1000+ %
Australian	460%	620%	170%	5060%	1000+ %
New Zealand Maori	620%	690%	2340%	5830%	1000+ %
Melanesians	570%	640%	2640%	2240%	1000+ %
Polynesians	560%	720%	2850%	1860%	1000+ %
Peruvian Indians	660%	550%	1360%	510%	1000+ %
Africans (Cattle Raising)	750%	820%	1910%	1660%	1000+ %
Africans (Agricultural)	350%	410%	540%	1660%	1000+ %

Beneficial Organisms Present in 1 Teaspoon of Healthy Soil

Organism	Number Present
Bacteria	360,000+
Fungi	60,000
Protozoa	100,000
Nematodes	500
Microarthropods	200,000

