

**Gamma Glutamyltransferase and Long-Term
Survival: Is It Just the Liver?**

Extrapolation of study data to U.S. Death Rates

2009 Total U.S. Population Deaths: 2,437,163	
2012 Total U.S. Population (Age 30-70 Yrs.)	
30-34 years	21,249,570
35-39 years	19,622,004
40-44 years	21,119,206
45-49 years	21,791,107
50-54 years	22,552,588
55-59 years	20,489,991
60-64 years	17,561,537
65-69 years	13,492,783
	157,878,786

- 100,000** Population Unit size
- 1,578.79** Population Units (per census estimate)
- 20.903%** 2009 Death Rate - All ages between 30-70 yrs. (**A** below)
- 20,903** Deaths per Population Unit - All ages between 30-70 yrs.
- 33,001,403** Total 40-yr.Deaths Ages 30-70
- 40** Divide by years to annualize
- 825,035** Annualized Deaths between ages 30-70
- 33.346%** % Premature Deaths attributed to elevated GGT (**B** below)
- 275,116** Elevated GGT-attributed Annual Deaths - Between ages 30-70
- 365.25** divided by days per year
- 753** Daily deaths

A -Table 6. Abridged life table for the total U.S. population, 2009				
Age Interval at Risk	Probability of Dying	5-Year Death Rate %	Death Rate % Reciprocal	Surviving Population Per 100,000
30-35	0.005491	0.55%	99.45%	99,451
35-40	0.007153	0.72%	99.28%	98,740
40-45	0.010672	1.07%	98.93%	97,686
45-50	0.016580	1.66%	98.34%	96,066
50-55	0.025295	2.53%	97.47%	93,636
55-60	0.035801	3.58%	96.42%	90,284
60-65	0.051385	5.14%	94.86%	85,645
65-70	0.076456	7.65%	92.35%	79,097
U.S. Total Deaths per 100,000 between age 30-70				20,903
U.S. Cumulative Death Rate between ages 30-70				20.903%

B - Austrian Population Study - Article #10 in GGT Science Library				
Population size	283,438	Mean age at study entry = 50 yrs.		
All-Cause Deaths	47,763	Median observation period = 7.6 yrs.		
Death Rate	16.85%	All-cause mortalities		
GGT Categories	Population %	Number	Deaths	Death %
Normal low	37.128%	105,235	11,820	11.23202%
Normal high	30.436%	86,267	14,316	16.59495%
Moderately elevated	11.805%	33,460	6,551	19.57869%
Elevated	5.679%	16,096	3,616	22.46459%
Highly elevated	14.952%	42,380	11,460	27.04128%
	100.00%	283,438	47,763	16.85130%
Deaths at GGT Low normal Rate		283,438	11.23%	31,836
Deaths at Actual Rate		283,438	16.85%	47,763
Deaths attributable to Elevated GGT				15,927
Incremental Death Rate attributable to Elevated GGT				33.346%