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Serum Level

Disease Incidence Prevention by Serum 25(OH)D Level

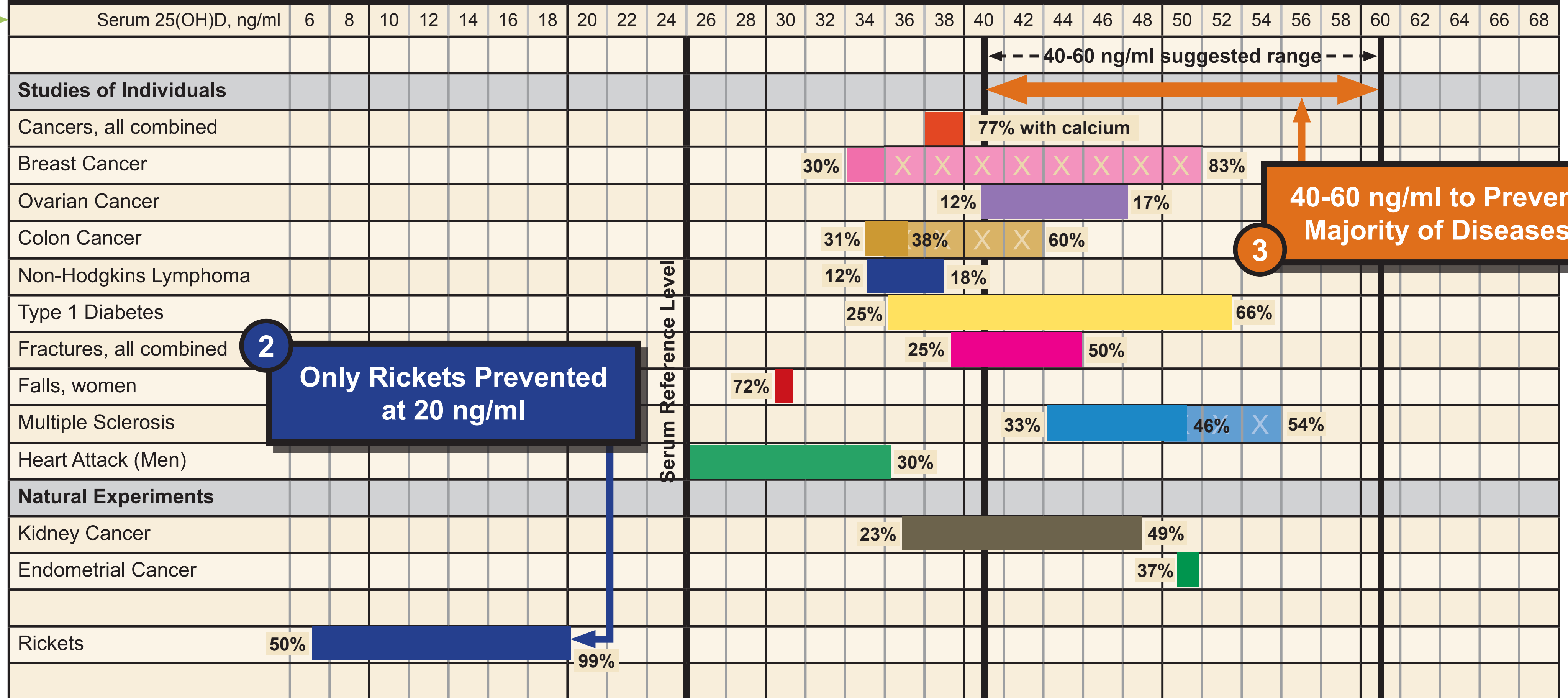


Chart prepared by: Garland CF, Baggerly CA

Legend:

All percentages reference a common baseline of 25 ng/ml as shown on the chart.

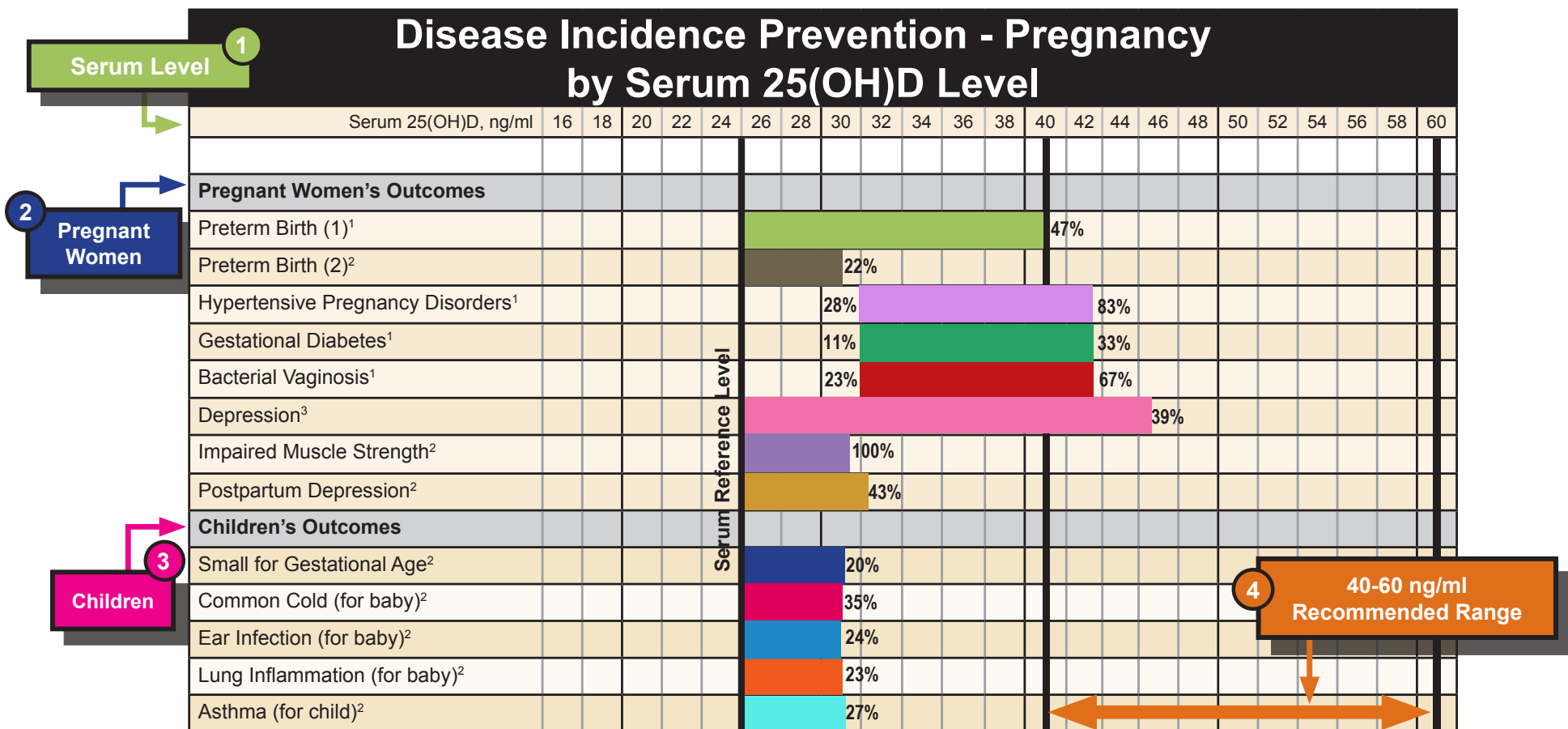
%'s reflect the disease prevention % at the beginning and ending of available data. Example: Breast cancer incidence is reduced by 30% when the serum level is 34 ng/ml vs the baseline of 25 ng/ml. There is an 83% reduction in incidence when the serum level is 50 ng/ml vs the baseline of 25 ng/ml.

The x's in the bars indicate 'reasonable extrapolations' from the data but are beyond existing data.

References:

All Cancers: Lappe JM, et al. Am J Clin Nutr. 2007;85:1586-91. Breast: Garland CF, Gorham ED, Mohr SB, Grant WB, Garland FC. Breast cancer risk according to serum 25-Hydroxyvitamin D: Meta-analysis of Dose-Response (abstract). American Association for Cancer Research Annual Meeting, 2008. Reference serum 25(OH)D was 5 ng/ml. Garland, CF, et al. Amer Assoc Cancer Research Annual Mtg, April 2008,. Colon: Gorham ED, et al. Am J Prev Med. 2007;32:210-6. Diabetes: Hyppönen E, et al. Lancet 2001;358:1500-3. Endometrium: Mohr SB, et al. Prev Med. 2007;45:323-4. Falls: Broe KE, et al. J Am Geriatr Soc. 2007;55:234-9. Fractures: Bischoff-Ferrari HA, et al. JAMA. 2005;293:2257-64. Heart Attack: Giovannucci et al. Arch Intern Med/Vol 168 (No 11) June 9, 2008. Multiple Sclerosis: Munger KL, et al. JAMA. 2006;296:2832-8. Non-Hodgkin's Lymphoma: Purdue MP, et al. Cancer Causes Control. 2007;18:989-99. Ovary: Tworoger SS, et al. Cancer Epidemiol Biomarkers Prev. 2007;16:783-8. Renal: Mohr SB, et al. Int J Cancer. 2006;119:2705-9. Rickets: Arnaud SB, et al. Pediatrics. 1976 Feb;57(2):221-5.

Disease Incidence Prevention - Pregnancy by Serum 25(OH)D Level



¹Data from randomized controlled trial

²Data from longitudinal study

³Data from cross-sectional study

Chart prepared by: Cuomo R, Aliano J, Baggerly C

Legend:

All percentages reference a common reference level of 25.0 ng/ml as shown on the chart. %'s reflect the disease prevention % at the beginning and ending of available data. Example: Gestational diabetes incidence is reduced by 11% when the serum level is 30.7 ng/ml vs the reference level of 25.0 ng/ml. There is a 33% reduction in incidence when the serum level is 41.9 ng/ml vs the reference level of 25.0 ng/ml.

References:

Preterm Birth (1): Wagner CL, et al. 17th Workshop on Vitamin D; 2014 June 17-20. **Preterm Birth (2):** Bodnar LM, et al. Obstetrics & Gynecology; 2015. **Hypertensive Pregnancy Disorders, Gestational Diabetes, and Bacterial Vaginosis:** Wagner CL, et al. J Steroid Biochem Mol Biol. 2013;136:313-320. **Depression:** Huang JY, et al. J Womens Health. 2014;23(7):588-95. **Impaired Muscle Strength:** Kalliokoski P, et al. BMC Pregnancy Childbirth. 2013;13(237). **Postpartum Depression:** Gur EB, et al. Eur J Obstet Gynecol Reprod Biol. 2014;179:110-6. **Small for Gestational Age:** Gernand, AD, et al. Obstet Gynecol. 2014;123(1):40-8. **Common Cold, Ear Infection, and Lung Inflammation:** Shin YH, et al. Korean J Pediatr. 2013;56(10):439-445. **Asthma:** Magnus MC, et al. Paediatr Perinat Epidemiol. 2013;27(6).