



PHARMACEUTICAL RESEARCH ASSOCIATES, INC.  
92 WILSHIRE PARK, NEEDHAM, MASS. 02192

SPECIALISTS IN PHARMACEUTICAL RESEARCH AND DEVELOPMENT

## REPORT OF ASSAY

Comparison of available calcium from CALPHONITE™ and from bone meal.

**Samples:** No. 1 Bone meal (crude tribasic calcium phosphate)

No. 2 CALPHONITE™ (A liquid calcium product derived from a patented process using dibasic calcium phosphate)

**General Method:** The sample, accurately measured, was placed in a volumetric flask, adjusted to 100 ml with artificial gastric juice, U.S.P. XVII, agitated for 5 minutes, and filtered. Aliquot of the filtrate was then titrated with a 0.05 molar solution of disodium ethylenediamine tetraacetate using hydroxynaphthol blue as the indicator.

**Results:** No. 1 Amount of calcium in sample (calculated) = 79.45 mg  
Amount of calcium in solution (found) = 31.86 mg  
Percent of calcium dissolved = 40.10%

No. 2 Amount of calcium in sample (calculated) = 80.00 mg  
Amount of calcium in solution (found) = 47.80 mg  
Percent of calcium dissolved = 59.75%

**Conclusion:** Based on the results of these assays, CALPHONITE™ provides 49% more calcium in solution than does a comparable amount of bone meal.

John W. Schermerhorn, Ph.D.  
April 7, 1966

continued >>

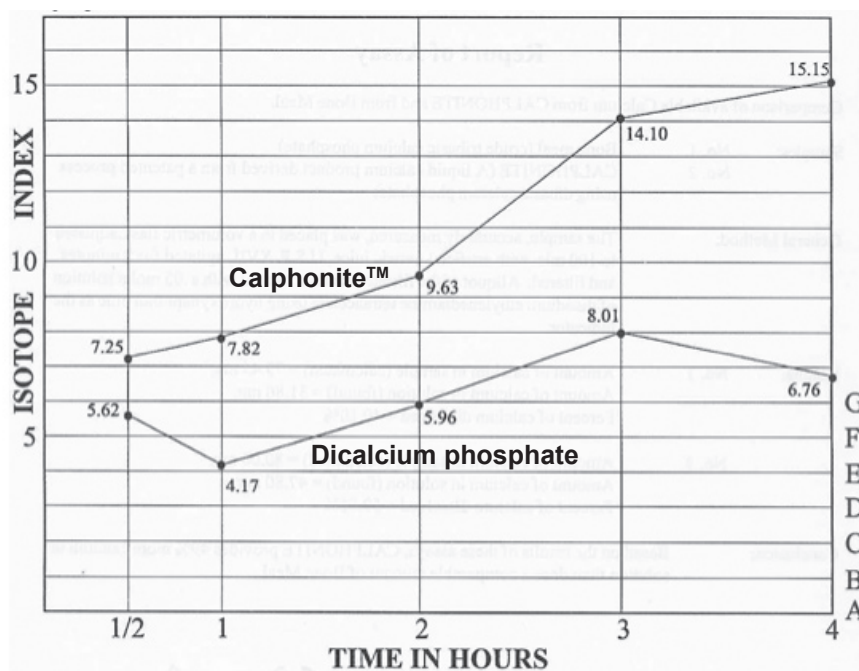


## REPORT OF ASSAY cont.

### RADIOISOTOPE COMPARISONS

To show comparative amount of blood calcium from 1/2 hour to 4 hours after feeding rats with Calphonite™, consisting of dicalcium phosphate processed with hydrated montmorillonite (bentonite) versus plain liquid dicalcium phosphate.

Fig. 1



#### Comments:

1. Comparing the amount of calcium assimilated at the 1st test point of 1/2 hour with the amount at the 4th hour, this patented process shows an increase of calcium in the blood of 8 points compared to 1 point for regular dicalcium phosphate, or 8 times more calcium in the blood.

2. If the normal calcium level of the blood before the experiment started was on:

- \*Line A: Process was 2.24 better
- \*Line B: Process was 2.43 better
- \*Line C: Process was 2.76 better
- \*Line D: Process was 3.23 better
- Line E: Process was 4.00 better
- Line F: Process was 5.76 better
- Line G: Process was 12.00 better

\*Improbable - since the rats own blood contained calcium probably this high or higher.