

dietary of certain types of persons is of definite value in improving their physical well-being and efficiency. However, caution must be observed in applying these results to the general public. It should be remembered that cod liver oil is not a panacea, it will not prevent all colds, nor should it be considered as a sure cure for colds and various other troubles. Nevertheless the investigations which have been discussed when coupled with those conducted by numerous other investigators<sup>1-8, 5-9, 15-16, 19-23, 25-27</sup>, supply a large volume of data indicating that cod liver oil is of value for reducing the prevalence of colds and similar infections and for improving the physical well-being of certain types of sub-normal persons.

### Bibliography

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## Concerning Packaging Laundry Soap

Editor, Oil and Soap:

Dear Sir:

The article appearing in your November issue entitled "Packaging Laundry Soap" by F. E. Joyce, Omaha, Nebraska, has come to our attention.

Although we do not doubt Mr. Joyce's sincerity, we are at a loss to reconcile his conclusion in connection with liner boards for solid fibre boxes with accepted technical knowledge of the materials concerned. For example, all papers or boards are similarly affected by moisture when manufactured from any of the conventional cellulose products in commercial use today. This embraces kraft as well as jute boards. As a matter of fact, kraft board has a tendency to pick up slightly more moisture than jute boards under conditions of high humidity. As authority for these statements we refer to the U. S. Forest Products Laboratory at Madison, Wisconsin, and enclose a copy of a recent graph prepared at Madison indicating the average changes encountered by all papers with moisture changes, and also a copy of their Project L-128-3 published August 25, 1933, which deals specifically with jute and kraft liner board.

The speed by which papers are affected by changes in humidity depends upon the relative porosity of the sheet and its sizing, although both of these qualities have a relatively small effect in retarding moisture changes.

The statements concerning porosity in the article are, we feel, misleading. So-called "kraft" liners with a thickness of .016 of an inch are generally manufactured with a variation in weight all the way from 42 to 60 pounds per thousand square feet. The heavier sheets are, naturally, more closely formed and are, therefore, less porous than the lighter sheets. As a rule, no commercial jute board is manufactured with a weight less than 60 pounds per thousand square feet, and is there-

fore all closely formed. The great majority of kraft liners sold are in the lighter weight divisions, and are usually 25 times more porous than commercial jute liner boards when compared upon the Gurley densometer. It is possible that Mr. Joyce's experience may have been confined to high quality closely formed kraft liner boards of substantial weight, in which case the densometer result would be less disadvantageous when compared to a good commercial jute liner, although we do not believe that any kraft boards ordinarily encountered will compare favorably with good commercial jute liner in porosity test.

If Mr. Joyce can arrange to obtain samples of the liner boards involved, we would suggest that they be forwarded to some capable paper testing laboratory for comparison, or to the Forest Products Laboratory at Madison for analysis. We should be glad to cooperate in any way with respect to such tests.

The box consuming industries have been very much confused in recent years due to the wide differences in quality between kraft liners of light or heavy weight. An analysis of comparable values should always be accompanied by a definition of the weight or density of the materials under consideration. In this connection we are attaching a reprint of an article which recently appeared in *Shears Magazine* and which may serve to throw some additional light on the subject.

We should be indebted to you if you would convey this information to Mr. Joyce, and also if you can suggest some suitable means by which an unintentionally misleading impression may be corrected with your readers.

Very truly yours,

CONTAINER CORP. OF AMERICA  
 E. A. Throckmorton,  
 Sales Promotion Manager.