

## STOOL TESTING

### 1 sample:

**"A single stool specimen examination will miss many pathogenic protozoan infections in symptomatic persons. RA Hiatt et al, 1983**

**Testing one stool sample finds less than half of all infections. (B.H.Kean, M.D., C.L.Malloch, MD. Am.J.of Dig.Dis. Vol 11, No.9, 1966)**

### Three samples in fixative:

Three fixed samples is **up to** 80+% diagnostic.

*B.H.Kean, M.D., & C.L.Malloch, MD. Am.J.of Dig.Dis. Vol 11, No.9, 1966*

*The John Hopkins Microbiology Newsletter, Vol. 18, No. 4. 1999*

### **because:**

- A number of patients may intermittently shed protozoa in their stool. Similarly, some protozoa (*G. intestinalis* and *D. fragilis*) have been shown to have highly variable and intermittent shedding. (van Gool et al., 2003)
- There is marked fluctuation in the shedding of the parasite from day to day, varying from as high as 17 to 0 per x40 microscopic field. The cystic stages when estimated in 8 Blastocystis-infected individuals ranged from as high as  $7.4 \times 10^5$  cysts per gram of stool to 0. (Parasitol Res. Vennila GD, et al . 1999 Feb;85(2):162-4)
- The number of organisms excreted daily fluctuated markedly in the one case investigated. With regard to the distribution of the parasite within a stool, considerably greater numbers were found in the last portion evacuated than in the first half. *Dientamoeba fragilis*, a review with notes on its epidemiology, pathogenicity, mode of transmission and diagnosis. Yang & Scholten, Am J Trop Med Hyg. 1977 Jan;26(1):16-22.

**The following can distort parasite morphology or knock down the parasite to temporarily undetectable levels:** Antibiotics; antacids; antiprotozoal agents including anti-parasitic herbs, tetracyclines and other antibiotics; sulfonamides; bismuth preparations; laxatives including castor oil, magnesium hydroxide (Milk of Magnesia), barium sulphate; bismuth kaolin compounds; hypertonic salts; mineral supplements; non absorbable antidiarrheal medications; enemas; intestinal radiocontrast agents.

**Purging:** Intestinal parasites seldom colonize the lower colon, and therefore, purged stools appear to be more efficient for finding parasites residing in the cecum (6). The terminal portions of stool collected from our purged patients yielded the highest number of *B. hominis* organisms, and this finding suggests that *B. hominis* has a propensity for cecal colonization, as does *E. histolytica*. *JOURNAL OF CLINICAL MICROBIOLOGY, Oct. 1986, p. 548-550 Sheehan et al.*

Purging involves taking a strong laxative to force parasites out of the bowel. However some laxatives interfere with the stains used by the lab. Use only laxatives which are proven not to interfere with lab stains: Picoprep is considered "safe". Available in pharmacies. **Please consult a dr before using.** Purging is not suitable for PCR testing. Please consult lab for advice.