

obtained from another series of four examined skinfolds [UMB (u), UMB ^ THI, ROT(u)]. MANOVA analysis resulted in a nearly significant INTERACTION [F (40,68)=1.55, p<0.06] in the absence of statistical significance for TREATMENT as main effect [F (8,100)=1.43, p=0.20].

When the specific effect of the INTERACTION was evaluated for each skinfold, highly significant differences were found. By computing F (10,265) values, we obtained the following results: UMB (u) (see panel A), p<10-3; UMB (u) (see panel B), p<10-5; ROT (see panel C), p<0.05; THI (see panel D), p<10-6. When we restricted the data analysis from weeks 2 to 5, we found nearly significant results for factor TREATMENT as main effect [F (8,100)=1.75, p<0.1] and for the effect of the INTERACTION [F (24,84)=1.55, p<0.06]. The INTERACTION was further studied pairing P group against each hCG-treated group in separate multivariate analyses.

By comparing P vs. G1, we found: for UMB(i), p<0.04, and for RQT , p<0.03 (UMB(u) and THI achieved nearly significant p values). Again, the strength of the INTERACTION [TREATMENT x WEEK] was higher when group G2 was selected for the comparison.

From the obtained data, it becomes clear that skinfolds determinations in Q2 subjects showed a differential response to VLCD schedule with respect to that of P controls (for INTERACTION, in these points of skinfold assessment, p<0.0005).

### 5. Selective response of some skinfolds to hCG was dependent on dose.

The experimental design of this investigation was not intended to determine the dose-response curve for hCG acting on diet-induced effects.

However, the effects of hCG on some of these skinfolds seemed to be dependent on dose, significant differences for the effect of the INTERACTION after the comparison between G1 vs. G2 groups for UMB (u) (p<0.001) and UMB (i) (p<0.005), and a nearly significant p value for THI (p=0.11).

Figure 4 also displays the percentages of skinfold thickness reduction from the beginning to the end of the clinical trial. We found skinfolds decreases for group G1 ranging from over 22% (for UMB (u), see panel A) up to over 115% (for THI, see panel D) over respective decreases in P group. These differences were still higher when G2-subjects were compared to P controls:

by computing the ratio between decrease percentages, G2 had over twice (for UMB (u), see panel A) to over four-fold (for THI, see panel D) the skinfold records drops observed in group P (see each actual percentage, group by group, in Fig. 4).

Most of the differences among hCG-treated subjects and P controls regarding skinfold reduction rates were enhanced when data corresponding to week five was compared to records of week two instead week zero (data not shown).

### 6. Improvement in mood-related parameters by hCG.

In Figure 5, we display the responses to four representative questions asking about the occurrence frequency for specific mood-related events, according to a multiple choice designed questionnaire completed every treatment week by all the subjects enrolled in the trial.

Panels A to D display the initial and final questionnaire results, expressed as percentages for each optional response (covering a four-option frequency scale from never to frequent).

Using this procedure, we expected to find, in tested volunteers, skewness towards either sense concerning their behaviors and feelings in response to a diet and a pharmacological intervention. For all these questions, and compared to control subjects, hCG-treated volunteers (G1+G2) showed a trend to improvement of interpersonal contacts and mood control when confronting upsetting or conflicting situations. Pairing off final (f) vs. initial (i) distribution of percentages for optional responses, we particularly found statistical significance in two of these questions in group G (after test:  $\chi^2=16.3$ , p<0.002, and  $\chi^2=7.82$ , p<0.05; see right sectors of panel A and B, respectively).

P group-subjects did not present temporal differences (see panel A), or were adversely affected in their mood during the trial  $\chi^2=14.4$ , p<0.002 (compare in panel B corresponding initial and final values for group P and G).

Furthermore, group P exhibited, in two other questions, certain skewness to the impairment of its mood (see left half of panels C and D, p<10-5 ); for group G we obtained the  $\chi^2$  values 1.51 and 3.98, respectively (p>0.3), showing the absence of temporal mood changes.

For all other mood-related questions, no statistical sig-  
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