

# 6TH CLINICAL SYNOPSIS





## THE EFFECTS OF BOD•Ē PRO TEN ON DHEA

Human Clinical Study 6th Pilot Project

#### **ABSTRACT**

A pilot study was undertaken to observe a possible increase effects of Bod•ē Pro TEN, a dietary supplement, on DHEA blood levels in subjects with normal healthy levels.

Dehydroepiandrosterone (DHEA), a hormone produced by the adrenal glands. It is a precursor to the sex hormones estrogen and testosterone. Blood levels of DHEA peak in one's twenties. Then they decline dramatically with age, decreasing to 20-30% of peak youthful levels between the ages of 70 and 80. Subjects' DHEA (blood marker for blood hormone levels) were assessed monthly up to 12 weeks taking two Bod•ē Pro TEN supplements daily. Ten individuals participated in the study.

Although sample sizes were small, statistical evaluation using matched pairs T test showed that the group experiencing slightly higher than normal blood DHEA levels were significantly upregulated with supplementation (p <0.05). The unit change in up-regulation of blood DHEA was also statistically significant (p < 0.05). A study is warranted to

observe this effect in a larger population. No untoward side effects were observed in either group supplementing with Bod•ē Pro TEN for 12 weeks.

## INTRODUCTION

Dehydroepiandrosterone (DHEA), a hormone produced by the adrenal glands; it is a precursor to the sex hormones estrogen and testosterone. Blood levels of DHEA peak in one's twenties. Then they decline dramatically with age, decreasing to 20-30% of peak youthful levels between the ages of 70 and 80.

## **METHODS**

Ten participant 3 females and 7 males between the ages of 40 and 70 were admitted into the study. All participants signed a voluntary consent form and were informed of the dietary supplements' ingredients, Bod•ē Pro TEN, and safety. The DHEA test was chosen to measure the effects of Bod•ē Pro TEN on normal DHEA levels.

#### Standards for DHEA Levels

| Premature      | <40 ng/mL*  | 11-14 years    | <5.0 ng/mL |
|----------------|-------------|----------------|------------|
| 0-1 day        | <11 ng/mL*  | 15-18 years    | <6.6 ng/mL |
| 2-6 days       | <8.7 ng/mL* | 19-30 years    | <13 ng/mL  |
| 7 days-1 month | <5.8 ng/mL* | 31-40 years    | <10 ng/mL  |
| >1-23 months   | <2.9 ng/mL* | 41-50 years    | <8.0 ng/mL |
| 2-5 years      | <2.3 ng/mL  | 51-60 years    | <6.0 ng/mL |
| 6-10 years     | <3.4 ng/mL  | > or =61 years | <5.0 ng/mL |

<sup>\*</sup>Source: Dehydroepiandrosterone. In Pediatric Reference Ranges. 5th edition. Edited by SJ Soldin, C Brugnara, EC Wong. Washington, DC, AACC Press, 2005, p 75

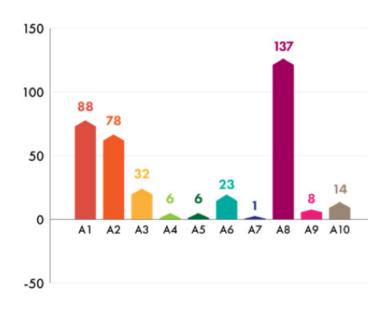




## **RESULTS**

The ten subjects involved in the study observed DHEA levels increase 1 – 137 ng/mL. The average increase in DHEA levels was 39 ng/mL; a 34.8% increase from the beginning DHEA average.

|                 | DHEA   |         |              |
|-----------------|--------|---------|--------------|
|                 | WEEK 0 | WEEK 12 | CHANGE       |
| Participant A1  | 294    | 382     | 188          |
| Participant A2  | 75     | 153     | <b>†</b> 78  |
| Participant A3  | 70     | 102     | <b>†</b> 32  |
| Participant A4  | 104    | 110     | 1 6          |
| Participant A5  | 48     | 54      | 1 6          |
| Participant A6  | 63     | 86      | <b>†</b> 23  |
| Participant A7  | 129    | 130     | <b>†</b> 1   |
| Participant A8  | 97     | 234     | <b>†</b> 137 |
| Participant A9  | 108    | 116     | 1 8          |
| Participant A10 | 123    | 137     | <b>†</b> 14  |





## CONCLUSION

This preliminary evaluation shows the possibility that this supplement, Bod•ē Pro TEN may have a beneficial effect towards helping maintain healthy DHEA levels within the normal range and warrants further study with a larger population.\*

## REFERENCES

- 1. Clin Endocrinol (Oxf). 1998 Oct;49(4):421-32.Morales AJ1, Haubrich RH, Hwang JY, Asakura H, Yen SS.
- 2. Klinge CM, Clark BJ, Prough RA. Vitam Horm. 2018;108:1-28. doi: 10.1016/bs.vh.2018.02.002. Epub 2018 Mar 16.
- 3. Dehydroepiandrosterone. In Pediatric Reference Ranges. 5th edition. Edited by SJ Soldin, C Brugnara, EC Wong. Washington, DC, AACC Press, 2005, p 75.

