IgnSleep Final Report
April 4, 2026

60 people were randomly selected for two groups and every person received a SmartRing for measuring sleep phases duration at night. For the first 7 days all the people did measurements, from the 8th day they started using supplements:
Experimental group – IgnSleep,
Control group – placebo.

Participants
In the study participated 60 people (27 men and 33 women) aged 40-76 years. The average age was 56.52 ± 9.94 years.
Inclusion criteria: individuals over 40 years of age without decompensated medical conditions who were willing to comply with all experimental conditions and who had completed informed consent.
Exclusion criteria: exacerbation of chronic diseases, organic brain diseases, mental illness, use of sleep medications, use of devices or treatments that could affect the study results, and pregnancy.
Exclusion criteria: acute illness during the study, failure to comply with experimental conditions.
Study type: single-blind, randomized, controlled trial with single-blind randomization.

Protocol of the study
A sleep tracker—a portable fitness ring-shaped device with a heart rate monitor and accelerometer (Smart Ring)—was used to study sleep phases. The tracker calculates REM sleep phases based on heart rate using the SmartHealth app (Fig. 1).
The app is compatible with both Android and iOS platforms.
The app determines deep sleep, light sleep, REM sleep, sleep duration, and the number of awakenings.

Fig.1. Smart Ring label

Study Design.
The experiment lasted 21 days in a familiar home environment. Sleep tracker data was collected daily. Each participant's daily sleep history was entered into a database.

Participants (60 people) were divided into 2 groups using simple randomization:
• Experimental Group 1 (30 people) monitored their sleep without any interventions for the first seven days. From Days 8 to 21, this group took two IgniSleep capsules one hour before bed.
• Control Group 2 (30 people) monitored their sleep without any interventions for the first seven days. From Days 8 to 21, this group took two placebo capsules one hour before bed.

All participants received standard instructions on using the sleep tracker, the mobile app, and medication administration from trained personnel.

Statistical Methods. All data collected during the study were analyzed using the Student's t-test of subjects - baseline (7 days) in relation to the data of taking the dietary supplement (placebo) (14 days) in each group and in comparison of the two groups.

Results

The experimental and control groups were comparable in age (56.47 and 56.47 years), gender (male-female ratio 14 and 16 in the experimental group and 13 and 17 in the control group, respectively), as well as initial data on % REM (21.09±0.99 in the experimental group versus 20.33±1.20% in the control) – $p>0.05$. Table 1 shows the comparison data of the two groups before and after taking the drugs within the group and between the groups.

Table 1. Rem/Total duration %% averaged on the groups.

	Experimental	Control	T-test
First 7 days	21.12±1.16	20.35±1.29	0.22
Days 8-21	26.28±1.28	18.45±1.21	< 0.001
T-test	< 0.001	< 0.01	

After the second phase of the experiment (taking IgniSleep/placebo), there was a significant increase in % REM sleep in the experimental group ($p<0.001$), and a significant decrease in the control group ($p<0.01$) (Figure 2).

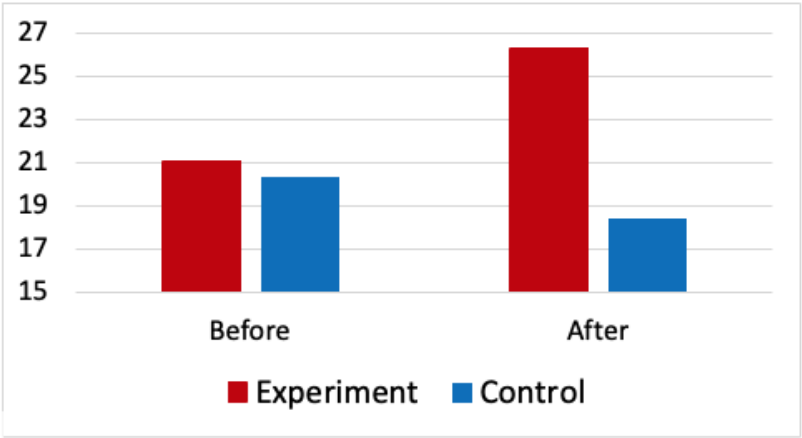


Figure 2. The percentage of REM sleep in the experimental and control groups before and after taking IgniSleep and placebo, respectively ($p<0.001$).

The average individual % REM values of each member of the 30 subjects in the experimental group before (7 days) and after (14 days) taking IgniSleep are shown in the figure 3.

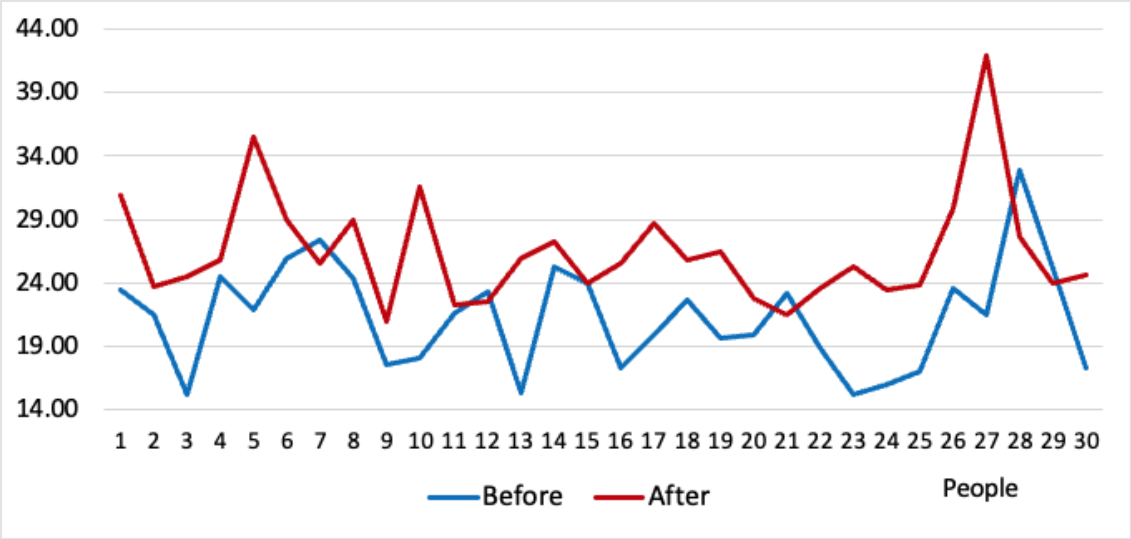


Figure 3. Percentage of REM sleep in the experimental group before and after taking IgniSleep ($p<0.001$)

The figure shows that the average individual % REM values for 26 of the 30 subjects in the experimental group were significantly higher than baseline after taking IgniSleep. The average group % REM increased from 21.09±0.99% to 26.28±1.28%, $p<0.001$, or an increase of 24.6%.

For 4 people parameters of their sleep didn't change after taking IgniSleep.

The average individual % REM values for each of the 30 subjects in the control group before and after taking placebo (7 days) and after (14 days) are shown in Figure 4.

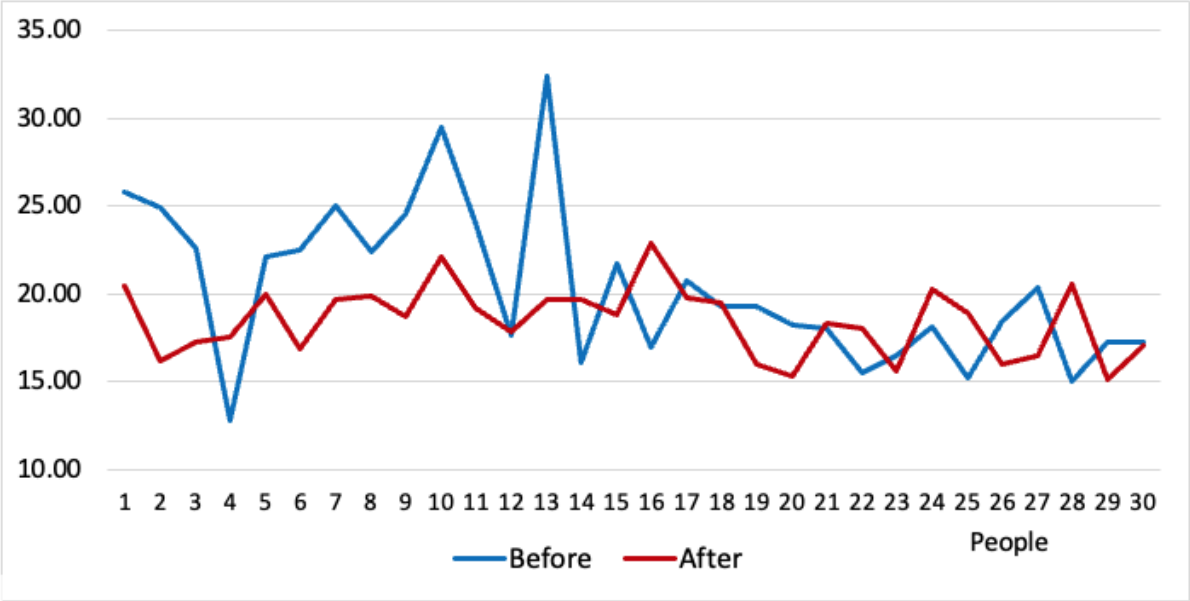


Figure 4. Percentage of REM sleep in the control group before and after taking placebo ($p<0.01$).

Although the average decrease in REM sleep in the control group was significant during the study (20.33±1.20% vs. 18.45±1.15%, $p<0.01$), this 9.2% decrease was mostly due to the reaction of 8 people.

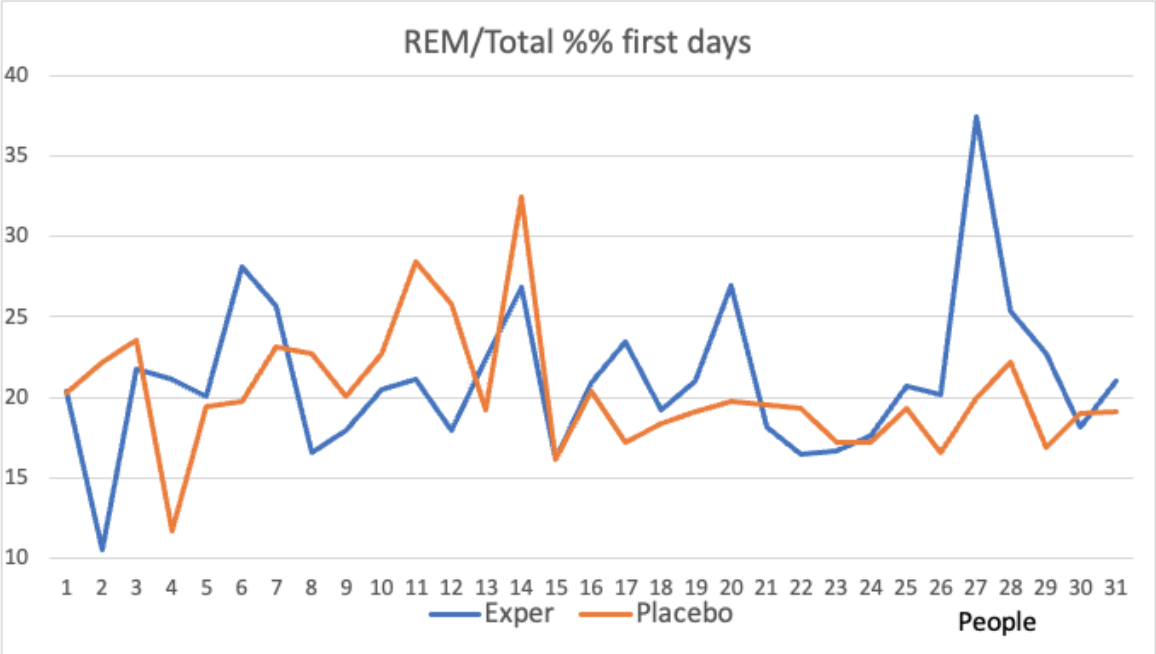
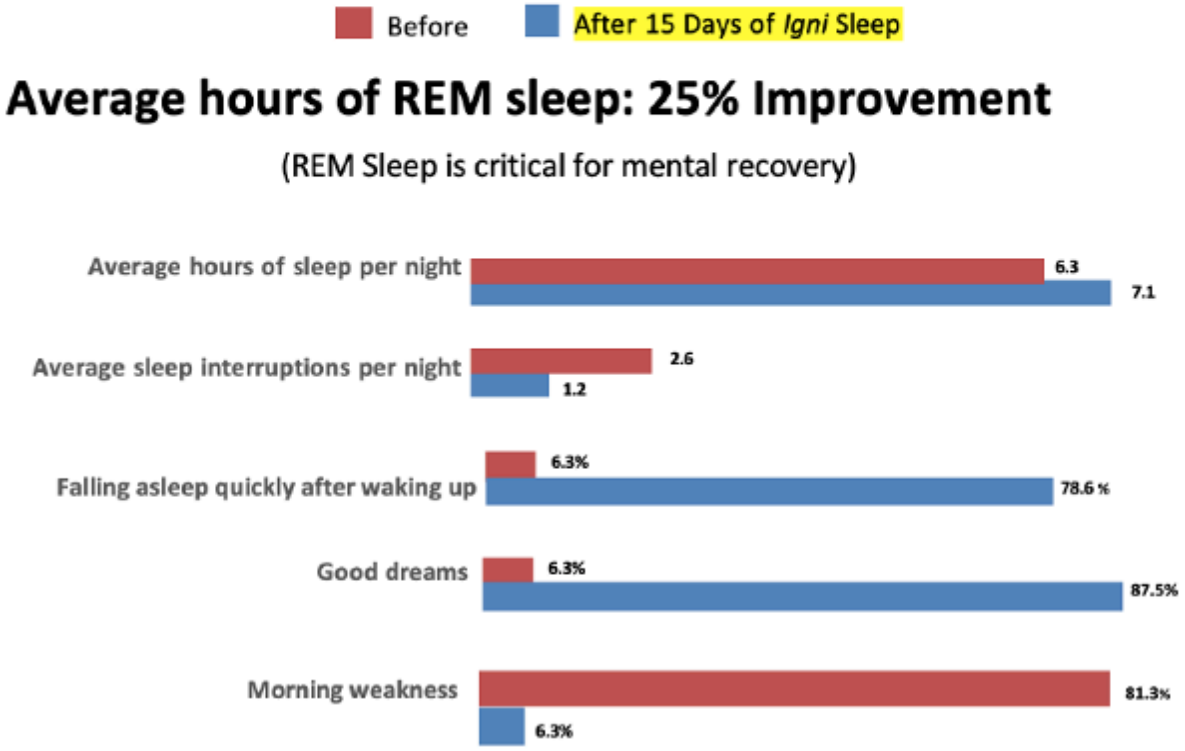


Fig.5. Percentage of REM sleep for the experimental and control groups in the first 7 days.

Igni REM Sleep – Test Report (N=60)

April 2026



Conclusions.

An experiment involving 30 subjects and 30 control group individuals showed promising reliable results from taking IgniSleep (2 capsules per night) for 14 days in terms of improving sleep quality, due to an increase in the REM sleep phase (% REM sleep) in its total duration by an average of 24.6%.

In the experimental group the duration of the REM phase increased significantly after consuming IgnSleep supplement.
In the control group the duration of the REM phase decreased significantly after consuming Placebo.
Response to the IgnSleep supplement was individual: for 4 people from 30, IgnSleep produced no effect.

References

1. Aserinsky E., Kleitman N. Regularly occurring periods of eye motility, and concomitant phenomena, during sleep. Science. 1953 Sep 4;118(3062):273-4. doi: 10.1126/science.118.3062.273. PMID: 13089671.
2. Blumberg M.S., Lesku J.A., Libourel P.A., Schmidt M.H., Rattenborg N.C. What Is REM Sleep? Curr Biol. 2020 Jan 6;30(1):R38-R49. doi: 10.1016/j.cub.2019.11.045. PMID: 31910377; PMCID: PMC6986372.
3. Borel A.L. Sleep Apnea and Sleep Habits: Relationships with Metabolic Syndrome. Nutrients. 2019 Nov 2;11(11):2628. doi: 10.3390/nu11112628. PMID: 31684029; PMCID: PMC6893600.
4. Kunz D., Mahlberg R., Müller C., Tilmann A., Bes F. Melatonin in patients with reduced REM sleep duration: two randomized controlled trials. J Clin Endocrinol Metab. 2004 Jan;89(1):128-34. doi: 10.1210/jc.2002-021057. PMID: 14715839.