

# The Effectiveness of Synergie AMS™ treatments in reducing inches and the appearance of cellulite.

Robert L. Youngblood, M.D.

James E. Pickens, M.D., F.A.C.S.

## Background and Purpose

Vacuum massage devices are currently used to deliver massage treatments for aesthetic improvement in the superficial fat layer of the skin. This study of 48 female subjects was designed to measure and document the effects of vacuum massage treatments with the Synergie AMS device. The purpose of this study was not only to observe whether changes in the appearance of cellulite may be derived, but also to measure whether and to what degree areas treated may expect to experience a loss in girth as a result of treatments. The study was also intended to determine the effect of adding further factors of exercise and nutritional supplements to the Synergie AMS treatment regimen.

## Method

### *Overview*

To accommodate the purpose of the study, four different criteria were established and applied to four different groups of women. Groups were identified A, B, C, and D.

- Group A received AMS treatments only.
- Group B received AMS treatments and took nutritional supplements.
- Group C received AMS treatments and added an exercise regimen.
- Group D received AMS treatments, took nutritional supplements, and added an exercise regimen.

To document results, subjects were measured and photographed at the start of the study, at the midway point, and at the end of the study. Each subject was given a relative cellulite rating from 1 to 5, with 1 indicating no visible cellulite, and 5 indicating most severe cellulite. At the end of the study, subjects were asked to evaluate whether they had seen significant improvement in their cellulite.

### *Subjects*

A group of volunteer female applicants was screened for meeting essential criteria: age (20 to 50 years old), weight (up to 40 pounds over ideal weight), contraindications (did not have any of the conditions listed by the manufacturer as contraindicated). A total number of 48 participants were selected from the applicants who met this criteria. During the term of the study, participants were prohibited from taking any dietary substances for weight loss purposes except the nutritional supplements provided to Groups B and D in conjunction with this study. Over the eight-week term of the study,

12 participants discontinued their participation due to pregnancy, illness, or inability or unwillingness to comply with criteria: Thirty-six participants completed the study including 11 from Group A, 8 from Group B, 7 from Group C, and 10 from Group D.

### *Apparatus*

The Synergie AMS device manufactured by Dynatronics was used to deliver treatments to the study participants. The device offers 10 vacuum settings and a countdown timer. Two treatment head sizes were used.

### *Procedure*

All participants in all four groups received a 30-minute AMS treatment twice a week for eight weeks, for a total of 16 treatments. All participants were instructed not to change their current eating habits, to drink 6-8 (8 ounce) glasses of water daily and up to 3 liters of water on the day of their treatments, and were prohibited from participating in a weight loss program during the study or from taking any weight loss supplements except those provided to their group (Groups B and D) as part of this study. In addition to these instructions, participants in each group were given specific rules and instructions for their respective groups.

**Group A.** No additional instructions or rules apply to Group A.

**Group B.** This group was required to take three nutritional supplements three times daily. The supplements, under the "Synergie NSP" brand name, included "Fat Metabolizer", "CarbAid™", and "MetaSlim™".

**Group C.** This group was required to add a moderate aerobic exercise regimen for 30 minutes three to five times a week.

**Group D.** This group was required to take the nutritional supplements described for Group B and was required to add the exercise regimen described for Group C.

Participants were provided with a daily log sheet to record their individual performance. The log sheet was reviewed by the AMS treatment technician at each treatment appointment, and the participant's compliance with the program was logged in the participant's file.

The AMS massage treatments were delivered primarily to the thigh, hip, abdomen, and buttocks areas, and to both right and left sides of the body. At the end of the fourth week and at the end of the study, each participant was again measured, and photographed. At the end of the study, each participant was asked to state a subjective opinion as to whether or not she has seen significant improvement in the appearance of her cellulite.

### *Data Analysis*

Data was compiled in a table with separate tabulations for each of the four groups; A, B, C, and D. Measurements for inches lost in the waist, hips, and thighs were added

together for a total of all inches lost for each individual. Inches lost were averaged by group.

## Results

Of the 36 participants who completed the study, 100% experienced a loss in girth. Table I shows the average inches lost by group. Group A lost an average of 3.4 total inches in the areas measured. Group B lost an average of 4.5 inches, Group C an average of 5.4 inches, and Group D an average of 6.1 inches.

Of all 36 participants, 91% reported visible improvement in the appearance of their cellulite: 31 said they saw significant, visible improvement in cellulite, 3 said they saw no visible improvement, and 2 did not report as they did not have visible cellulite at the start of the study. Of the 3 who reported no visible improvement, one was a participant in Group A, one in Group C, and one in Group D.

## Conclusions

The improvement in cellulite was essentially the same across all four groups of participants. Therefore, it is concluded that the AMS treatments themselves were the single most important factor resulting in improvement in the appearance of cellulite.

Greater loss of inches was seen when factors of exercise and nutritional supplements were added. The greatest inch loss was seen in the group that added both factors of nutritional supplements and exercise to the AMS treatments. It is, therefore, concluded that a complete program including Synergie AMS treatments, exercise, and nutritional supplements will produce the greatest possible results in inches lost.

Table I. Average inches lost by group

Group	Regimen Followed	% Showing Improvement in Cellulite*	Inches Lost-Waist	Inches Lost-Hips	Inches Lost-Thighs	Total Inches Lost
A	TREATMENTS ONLY	90%	-1.1	-1.4	-0.9	-3.4
B	TREATMENTS & NUTRITIONAL SUPPLEMENTS	100%	-1.2	-2.6	-0.6	-4.5
C	TREATMENTS & EXERCISE	86%	-2.4	-2.2	-0.8	-5.4
D	FULL PROGRAM	89%	-2.0	-2.8	-1.3	-6.1

## Synergie Study Summary Group Averages

	Id#	Visible Improvement in Cellulite	Final Girth Waist (Inches lost)	Final Girth Hips (Inches lost)	Final Girth Thighs (Inches Lost)	Final Total Inches Lost
<b>TREATMENTS ONLY</b>						
	A1	n/a	-1.4	-0.1	-1.0	-2.5
	A2	Y	0.0	-1.5	1.0	-0.5
	A3	Y	-1.2	-0.7	0.7	-1.2
	A4	N	-2.4	-2.8	-0.8	-6.1
	A5	Y	-1.1	-0.7	-0.6	-2.4
	A6	Y	-0.4	0.1	-0.2	-0.5
	A7	Y	-1.3	-1.7	-2.9	-5.9
	A8	Y	-1.0	-1.0	-0.8	-2.8
	A9	Y	-1.0	-2.0	-0.3	-3.3
	A10	Y	-0.9	-3.1	-5.8	-9.8
	A11	Y	-1.6	-1.7	0.9	-2.4
		90%	-1.1	-1.4	-0.9	-3.4
<b>TREATMENTS &amp; NUTRITIONAL SUPPLEMENTS</b>						
	B1	Y	0.3	-1.1	-0.6	-1.3
	B2	Y	-2.0	0.0	0.8	-1.3
	B3	Y	0.7	-2.4	0.0	-1.7
	B4	Y	-3.9	-5.9	-2.2	-12.0
	B5	Y	-2.4	-2.9	0.5	-4.8
	B6	Y	-1.5	-2.8	-0.5	-4.8
	B7	Y	-0.7	-2.3	-2.0	-5.0
	B8	Y	-0.2	-3.7	-0.8	-4.6
		100%	-1.2	2.6	-0.6	-4.5
<b>TREATMENTS AND EXERCISE</b>						
	C1	Y	-4.5	-2.2	-0.9	-7.7
	C2	Y	-0.9	-2.4	-2.0	-5.3
	C3	Y	-2.9	-4.3	-1.1	-8.4
	C4	Y	-1.3	-1.0	-0.6	-2.9
	C5	Y	-3.2	-2.5	0.2	-5.5
	C6	N	-1.4	-1.7	-0.2	-3.3
	C7	Y	-2.4	-1.5	-0.6	-4.5
		86%	-2.4	-2.2	-0.8	-5.4
<b>FULL PROGRAM</b>						
	D1	n/a	-1.7	-5.4	-0.9	-8.1
	D2	Y	-0.6	-3.4	-1.5	-5.4
	D3	N	-0.3	-0.6	-0.1	-1.0
	D4	Y	-3.3	-1.8	-2.0	-7.1
	D5	Y	-4.8	-2.7	-3.9	-11.5
	D6	Y	-1.5	-3.5	-1.0	-6.0
	D7	Y	-1.8	-2.3	1.3	-2.9
	D8	Y	-2.9	-4.1	-2.2	-9.2
	D9	Y	1.0	-4.1	-0.8	-3.9
	D10	Y	-4.3	0.0	-1.6	-5.8
		89%	-2.0	-2.8	-1.3	-6.1

# SYNERGIE AESTHETIC MASSAGE STUDY WINONA, MINNESOTA

*Conducted by Healthy Inspirations of Winona, MN*

Eight women received 16 treatments over an 8 week period with the Synergie Aesthetic Massage Unit using protocol by Dynatronics.

Each woman exercised. If they already had an exercise program they maintained it. If they were not previously exercising they performed moderate exercise 3 times per week.

Most maintained their existing eating habits. All were asked to drink 8 glasses of water per day- 12 on days of treatments.

Total inch loss on waist, hips and thighs was as follows:

Participant	Inch Loss
W1B	9
W3B	1
W2C	6.75
W2A	2.5
W2B	5.25
W4B	4
W1C	4.5
W7A	7.25
Average	5

It was interesting to note that expectations influenced a person's perception of the results achieved.

Participant W3B had the poorest results of inch loss- by far. However, her written comments were that she had a significant improvement in the appearance of her cellulite and that the extent of the firming of the skin was very noticeable. She said her clothes fit differently and that the circulation in her extremities had improved. She felt very positive about the results.

Participant W2C who had high inch loss enjoyed the treatments but was disappointed her legs did not have a more significant difference in their appearance.

There was not a measureable reduction in weight or body fat percentage among the participants.

All of the participants felt the experience was pleasant and most indicated it improved their self esteem.