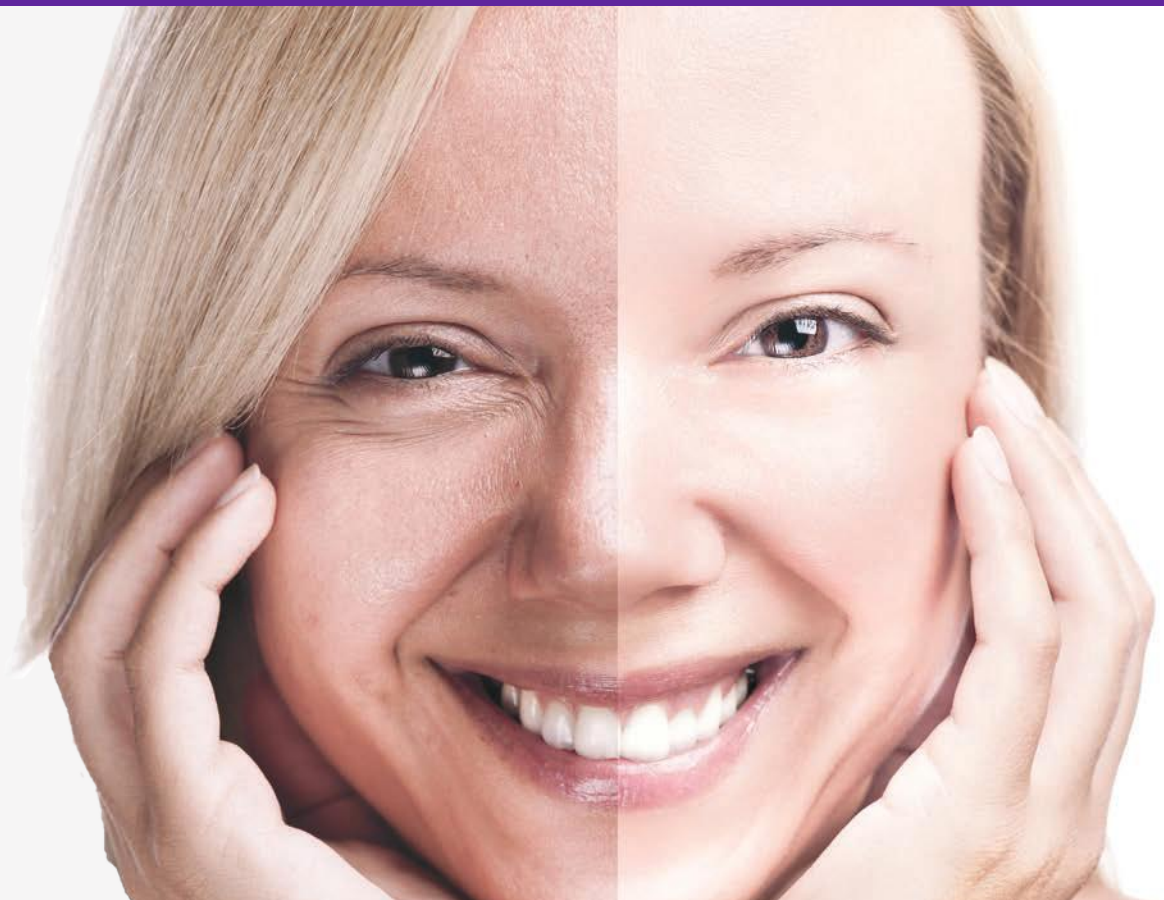


i₂ Integrity Ingredients Corporation
"Your **Innovation** Partner"

IntegriACTIVE FirmLIFT



Long term firming,
lifting and anti-aging benefits...

IntegriACTIVE FirmLIFT - TECHNICAL DATA SHEET

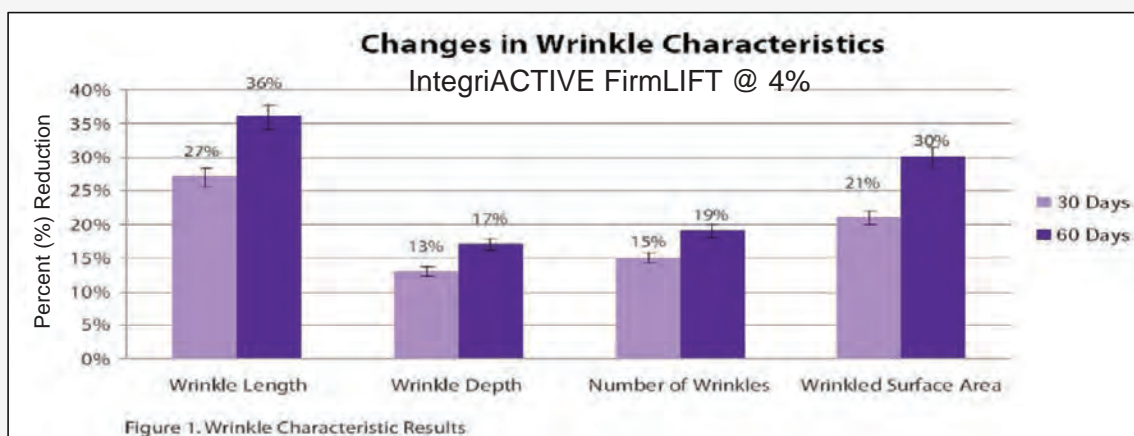
INCI Name: Hydrolyzed Rice Protein (and) Water (and) Prunus Amygdalus Dulcis (Sweet Almond) Seed Extract

IntegriACTIVE FirmLIFT is a unique ingredient that consists of a blend of small and large peptides. This blend is designed to provide immediate skin lifting and firming properties while simultaneously providing long term intense anti-aging benefits.

IntegriACTIVE FirmLIFT contains sweet almond seed extract and hydrolyzed rice proteins. This innovative, natural polymer created from sweet almond peptides adheres to the out most layer of the skin forming a stable yet soft and supple film. This film provides both immediate and perceivable skin lifting and tightening benefits which are ideal for a wide range of cosmetic applications.

In addition to their superb anti-aging benefits, almonds also provide a great marketing appeal. These nutritious seeds have long been used in a variety of culinary, medicinal and cosmetic applications. They have been used by many civilizations throughout the years to enhance the complexion and suppleness of the skin. Sweet almonds products may also add anti-inflammatory benefits and have long been recognized to have a fine texture that leaves the skin feeling silky smooth.

The other component of IntegriACTIVE FirmLIFT consists of small sized peptides of hydrolyzed rice proteins. The size of these peptides are typically less than 1400 Da. and the addition of the small peptides has a synergistic effect and greatly enhance the overall efficacy.



Suggested Usage Level: 2.0 - 10.0%

These peptides are designed to stimulate fibroblast proliferation, enhance collagen synthesis and improve cellular metabolism. By increasing cellular proliferation and metabolism we can help create a brighter, healthier and younger looking complexion. Enhancing collagen I synthesis helps minimize the appearance of fine lines and wrinkles to provide a more revitalized, smoother and firmer looking complexion.

IntegriACTIVE FirmLIFT

The effectiveness of IntegriACTIVE FirmLIFT was evaluated in a variety of in vivo and in vitro studies. In Figure 1 we illustrate the ingredients capability to minimize wrinkles. After applying 4% of IntegriACTIVE FirmLIFT daily for 60 days, a 36% reduction in wrinkle length was observed. The study also showed a 17% reduction in wrinkle depth, a 19% reduction in their quantity and a 30% reduction in wrinkle surface area were also achieved. After statistically analyzing the results we can confirm this ingredient is capable of significantly decreasing wrinkle characteristics to help provide smoother and firmer looking skin.

Figure 2 shows the capacity of this ingredient to deliver long term benefits by enhancing cellular proliferation. When used at 4% IntegriACTIVE FirmLIFT was able to increase proliferation by 72%. For this reason, this ingredient can also be used to significantly improve the skin's suppleness and minimize dull and tired skin to reduce the noticeable signs of aging. Other studies that were conducted show that IntegriACTIVE FirmLIFT is also capable of providing long term skin lifting benefits while enhancing cellular recovery after UV damage, ATP consumption and collagen I synthesis. All of these benefits help to create a smoother and revived looking skin.

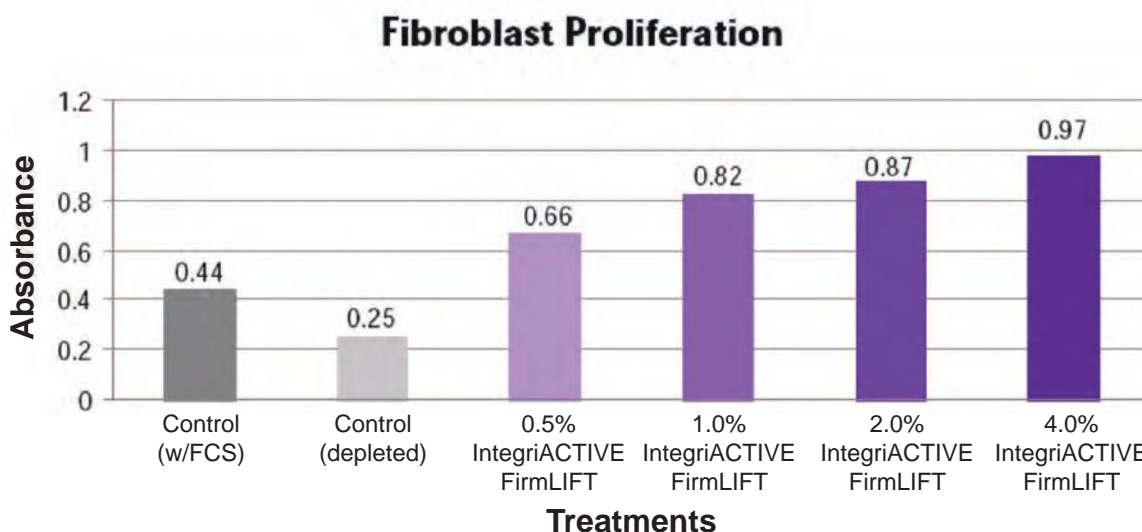


Figure 2. Fibroblast Proliferation Results

As a result this blend consisting of optimized rice peptides and the natural polymer derived from sweet almond peptides is an exceptional skin rejuvenating ingredient. IntegriACTIVE FirmLIFT is perfectly suited for cosmetic applications designed to revitalize the skin and to minimize and prevent further extrinsic aging. Additionally, the immediate perceivable benefits make IntegriACTIVE FirmLIFT the ideal dual action system which is also efficacious for helping to repair the visual signs of aging.



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IntegriACTIVE FirmLIFT

INCI Name: Hydrolyzed Rice Protein (and) Water (and) Prunus Amygdalus Dulcis (Sweet Almond) Seed Extract

Product Specification:

CAS # 73049-73-7 & 7732-18-5 & 90320-37-9

EINECS # N/A & 231-791-2 & 291-063-5

Suggested Use Level: 2.0 – 10.0%

Assay	Range
Appearance	Clear to slightly hazy liquid
Odor	Characteristic
Color	Amber to Dark Brown
pH	4.5 – 6.5
Solids (1g-1 hr-105°C)	5.0 – 13.0%
Microbial Content	< 100 opg No Pathogens

Compositional Breakdown:

Ingredient	%
Hydrolyzed Rice Protein	78.00 – 82.00
Water	9.00 – 11.00
Prunus Amygdalus Dulcis (Sweet A	9.00 – 11.00
EDTA 4*Na	0.08 – 0.12
Phenoxyethanol	0.50 – 1.50

To our knowledge the above material is free of materials classified as CMR in accordance with the Directive 2004/93 of 21 September 2004.



Integrity Ingredients Corporation

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IntegriACTIVE FirmLIFT

This is to certify that the following allergens were not detected in IntegriACTIVE FirmLIFT:

INCI Name	CAS#
Alpha-IsoMethyl Ionone	127-51-5
Amyl Cinnamal	122-40-7
Anise Alcohol	105-13-5
Benzyl Alcohol	100-51-69
Benzyl Benzoate	120-51-4
Benzyl Cinnamate	103-41-3
Benzyl Salicylate	118-58-1
Butylphenyl Methylpropional	80-54-6
Cinnamal	104-55-2
Cinnamyl Alcohol	104-54-1
Citral	5392-40-5
Citronellol	106-22-9
Coumarin	91-64-5
Eugenol	97-53-0
Farnesol	4602-84-0
Geraniol	106-24-1
Hexyl Cinnamal	101-86-0
Hydroxycitronellal	107-75-5
Hydroxymethylpentyl 3-Cyclohexene Carboxaldehyde	31906-04-4
Isoeugenol	97-54-1
Limonene	5989-27-5
Linalool	78-70-6
Methyl 2 Octynoae	111-12-6
Evernia prunastri	90028-68-5 90028-67-4
Amylcinnamyl Alcohol	101-85-9

ALLERGENS Dir 2003 15 CEE



IntegriACTIVE FirmLIFT - In-Vivo Skin Lifting Durability Study

Abstract:

The purpose of this study was to determine whether or not IntegriACTIVE FirmLIFT can provide significant skin lifting benefits as well as confirm how long these properties would last. A cutometer was used to measure changes in viscolastic properties on the thighs of 13 volunteers. Based on our findings, IntegriACTIVE FirmLIFT is capable of providing immediate and significant skin lifting benefits that can last up to 4 hours.

Materials and Methods:

The study was conducted with 13 (M/F) volunteers between the ages of 34 and 67 years old. All volunteers participated in a dry down phase 3 days prior to the commencement of the study. Participants were also asked to refrain from using other products on the test site for the entire duration of the study. Each volunteer was given a O/W emulsion containing 4% of IntegriACTIVE FirmLIFT which they applied to their right thigh. A cutometer (Courage-Khazaka electronic GmbH – MPA 580) was used to measure changes in skin lifting properties. The system works based on suction. Negative pressure is created inside the probe of the cutometer and the skin is forced into the aperture. The penetration depth is determined by a non-contact optical measuring system that consists of a light source, a light receptor and two prisms facing each other. The two prisms reflect the light from the transmitter to the receptor depending on the depth of the skin inside the probe. The values obtained are based on the resistance of the skin that is drawn into the probe as well as its ability to return to the original position. The measurements were taken at time 0 and again after 1, 2, and 4 hours. Each measurement was take for a period of 5 seconds. Skin deformation was determined according to 4 parameters: instantaneous deformation, delayed deformation, total elongation and immediate retraction.

The following formula was used to determine skin lifting:

$$\text{Skin Lifting} = (L_I + L_D) L_R$$

Parameters:

L_I = Instantaneous Deformation

L_D = Delayed Deformation

L_R = Immediate Retraction

The percent increase in skin lifting is expressed by the following formula:

$$\frac{T_0 T_2 \text{ or } T_4}{T_0} \times 100 = \% \text{ Increase in Skin Lifting}$$

Parameters:

T_0 = Skin Lifting at Time 0

T_2 = Skin Lifting at Time 2

T_4 = Skin Lifting at Time 4

IntegriACTIVE FirmLIFT - In-Vivo Skin Lifting Durability Study

Skin Lifting Measurements

Volunteers	T0	T1	T2	T4
1	0.398	0.365	0.374	0.39
2	0.284	0.253	0.212	0.278
3	0.561	0.499	0.467	0.524
4	0.203	0.182	0.172	0.195
5	0.449	0.435	0.365	0.432
6	0.375	0.344	0.308	0.359
7	0.286	0.266	0.223	0.271
8	0.312	0.278	0.278	0.303
9	0.45	0.423	0.39	0.431
10	0.227	0.205	0.202	0.219
11	0.519	0.491	0.434	0.506
12	0.373	0.356	0.321	0.354
13	0.385	0.342	0.316	0.367

Table 1. Skin Lifting Measurements

% Increase in Skin Lift

Volunteers	T1	T2	T3
1	8%	6%	2%
2	11%	25%	2%
3	11%	17%	7%
4	10%	15%	4%
5	3%	19%	4%
6	8%	18%	4%
7	7%	22%	5%
8	11%	11%	3%
9	6%	13%	4%
10	10%	11%	4%
11	5%	16%	3%
12	5%	14%	5%
13	11%	18%	5%
Average	8%	16%	4%

Table 2. Percentage Increase in Skin Lift

Durability of Skin Lifting

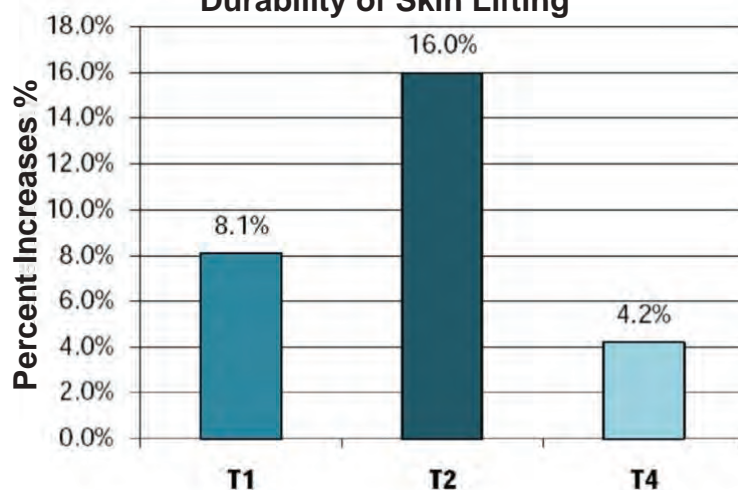


Figure 1. Percent Increase in Skin Lifting Properties

IntegriACTIVE FirmLIFT - In-Vivo Skin Lifting Durability Study

t-Test: Paired Two Samples for Means
Initial values (T_0) compared to 2 hours later (T_2)

	Values
Mean for T_0	0.370923
Mean for T_2	0.312462
Variance for T_0	0.011542
Variance for T_2	0.008544
Observations for T_0	13
Observations for T_2	13
Pearson Correlation	.98317
Hypothesized Mean Difference	0
df	12
t Stat	8.913155
P (T <= t) one-tail	6.11E-07*
t Critical one-tail	1.782288
P (T <= t) two-tail	1.22E-06
t Critical two-tail	2.178813

Table 3: T-test comparing the baseline with T_2

t-Test: Paired Two Samples for Means
Initial values (T_0) compared to 1 hour later (T_1)

	Values
Mean for T_0	0.370923
Mean for T_1	0.341462
Variance for T_0	0.011542
Variance for T_1	0.010412
Observations for T_0	13
Observations for T_1	13
Pearson Correlation	0.994109
Hypothesized Mean Difference	0
df	12
t Stat	8.443623
P (T <= t) one-tail	1.08E-06*
t Critical one-tail	1.782288
P (T <= t) two-tail	2.15E-06
t Critical two-tail	2.178813

Table 4: T-test comparing the baseline with T_1

* The results obtained are 99% significant.

IntegriACTIVE FirmLIFT - In-Vivo Skin Lifting Durability Study

t-Test: Paired Two Samples for Means

Initial values (T_0) compared to 4 hours later (T_4)

	Values
Mean for T_0	0.370923
Mean for T_4	0.356077
Variance for T_0	0.011542
Variance for T_4	0.010352
Observations for T_0	13
Observations for T_4	13
Pearson Correlation	0.998441
Hypothesized Mean Difference	1
df	12
t Stat	6.56536
P (T <= t) one-tail	1.33E-05*
t Critical one-tail	1.782288
P (T <= t) two-tail	2.67E-05
t Critical two-tail	2.178813

Table 5: T-test comparing the baseline with T_4

t-Test: Paired Two Samples for Means

Initial values (T_1) compared to 2 hours later (T_2)

	Values
Mean for T_1	0.341462
Mean for T_2	0.312462
Variance for T_1	0.010412
Variance for T_2	0.008544
Observations for T_1	13
Observations for T_2	13
Pearson Correlation	0.977298
Hypothesized Mean Difference	0
df	12
t Stat	4.5831
P (T <= t) one-tail	0.000315*
t Critical one-tail	1.782288
P (T <= t) two-tail	0.000629
t Critical two-tail	2.178813

Table 6: T-test comparing T_1 with T_2

Discussion:

As shown in figure 1, IntegriACTIVE FirmLIFT is capable of increasing skin lifting by 8.1% 1 hour after application. There was a 16% increase in skin lifting properties after 2 hours. After 4 hours, the values were still significantly increased when compared to the baseline.

These findings suggest that IntegriACTIVE FirmLIFT is not only capable of providing immediate skin lifting effects but the results are maintained for 4 hours. To provide perspective, statistical analysis was conducted to determine the significance of the results. Three different t-tests were performed to compare the baseline values with the values obtained after 1, 2 and 4 hours.

Based on the p-values obtained, we can confirm with 99% confidence that IntegriACTIVE FirmLIFT is capable of providing immediate skin lifting properties which can last up to 4 hours after a single application. For this reason, IntegriACTIVE FirmLIFT is well-suited for use in cosmetic applications designed to provide potent anti-aging benefits.

* The results obtained are 99% significant.

IntegriACTIVE FirmLIFT - In-Vivo Wrinkle Reduction Study

Abstract

The purpose of this study was to determine whether or not 4% of IntegriACTIVE FirmLIFT can significantly reduce the appearance of wrinkles by analyzing the change in their length, depth, quantity and area. The study was carried out using a profilometer and silicone polymer replicas to measure wrinkle characteristics on the eye area of 10 volunteers. Based on our findings, IntegriACTIVE FirmLIFT is capable of significantly reducing the appearances of wrinkles.

Materials and Methods

The study was conducted on 10 (M/F) volunteers between the ages of 36 and 70 years old. All volunteers participated in a dry down phase of 3 days prior to the commencement of the study. Participants were also asked to refrain from using other products on the test site for the entire duration of the study. Each volunteer was given a topical containing 4% of IntegriACTIVE FirmLIFT which they applied to the outer eye area (crow’s feet) twice daily for 60 days. The optical profilometer (Nanovea PS50) equipped with an image analyzer (Nanovea 3D Software) was used to evaluate the changes in wrinkle characteristics. 1cm² silicone replicas were made from the surface area around the eyes. The replicas were obtained before the initial application of the product and after 30 and 60 days. The length, depth, quantity and surface area of the wrinkles in the replicas were measured utilizing specialized computer software (Quantrides Software from Monaderm).

The percent decrease in wrinkles was obtained by using the following formula:

$$\frac{D_0 - D_{30} \text{ or } D_{60}}{D_0} \times 100 = \% \text{ Decrease of Wrinkles}$$

Wrinkle Length Measurements

Volunteers	Day 0	Day 30	Day 60
1	65.34	57.12	56.54
2	29.58	34.41	29.83
3	76.32	62.19	41.67
4	98.55	84.72	63.45
5	102.63	89.14	79.58
6	37.46	13.69	11.53
7	50.11	36.71	37.03
8	61.15	42.67	40.19
9	83.44	58.02	57.56
10	95.23	79.00	84.75
11	34.97	14.18	11.82
12	48.73	20.56	16.21
13	21.68	15.49	9.26

Table 1. Wrinkle Length Measurements

Wrinkle Depth Measurements

Volunteers	Day 0	Day 30	Day 60
1	45.77	39.99	36.24
2	56.38	38.49	33.73
3	62.01	55.65	51.20
4	66.87	48.89	57.62
5	34.51	28.76	30.16
6	48.23	47.96	43.84
7	44.57	39.88	36.27
8	35.25	32.64	30.71
9	49.62	47.99	44.45
10	64.94	61.03	58.55
11	33.79	32.58	31.47
12	53.38	50.17	50.46
13	68.61	66.94	62.75

Table 2. Wrinkle Depth Measurements

IntegriACTIVE FirmLIFT - In-Vivo Wrinkle Reduction Study

Quantity of Wrinkles

Volunteers	Day 0	Day 30	Day 60
1	121	86	82
2	56	49	51
3	89	70	66
4	94	83	77
5	88	81	71
6	83	74	70
7	67	59	53
8	91	86	65
9	104	97	93
10	69	63	68
11	113	101	95
12	77	74	71
13	96	91	88

Table 3. Quantity of Wrinkles

Wrinkle Surface Area

Volunteers	Day 0	Day 30	Day 60
1	0.936	0.632	0.608
2	0.753	0.551	0.528
3	0.258	0.144	0.120
4	0.486	0.373	0.314
5	0.921	0.752	0.676
6	0.667	0.603	0.568
7	0.505	0.391	0.367
8	0.234	0.128	0.093
9	0.736	0.695	0.604
10	0.380	0.262	0.225
11	0.899	0.819	0.762
12	0.273	0.274	0.239
13	0.659	0.598	0.559

Table 4. Wrinkles Surface Area

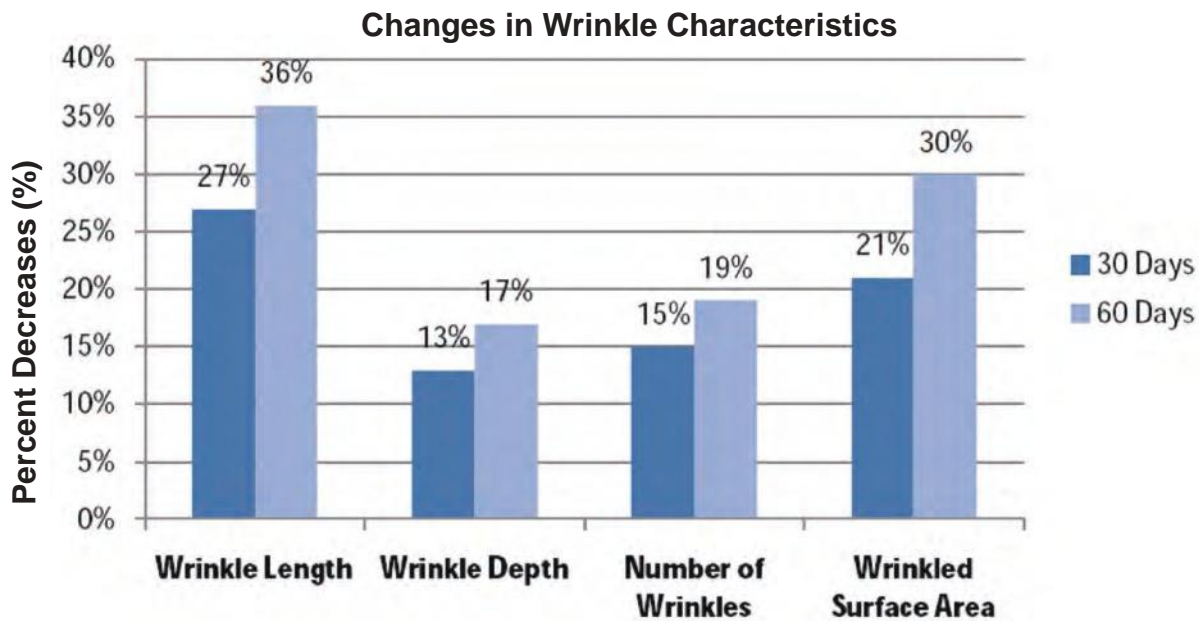


Figure 1. Percent Decrease in Wrinkle Characteristics

IntegriACTIVE FirmLIFT - In-Vivo Wrinkle Reduction Study

Table 5. t-Test: Paired Two Samples for Means
Initial values (D_0) compared to 30 days
later (D_{30}) in Wrinkle Length

	Values
Mean for D_0	61.93769
Mean for D_{30}	46.76154
Variance for D_0	757.8794
Variance for D_{30}	736.5194
Observations for D_0	13
Observations for D_{30}	13
Pearson Correlation	0.948267
Hypothesized Mean Difference	0
df	12
t Stat	6.217393
P (T <= t) one-tail	2.23E-05*
t Critical one-tail	1.782288
P (T <= t) two-tail	4.47E-05
t Critical two-tail	2.178813

Table 7. t-Test: Paired Two Samples for Means
Initial values (D_0) compared to 60 days
later (D_{60}) in Wrinkle Length

	Values
Mean for D_0	61.93769
Mean for D_{60}	41.49385
Variance for D_0	757.8794
Variance for D_{60}	658.5497
Observations for D_0	13
Observations for D_{60}	13
Pearson Correlation	0.918826
Hypothesized Mean Difference	0
df	12
t Stat	6.780453
P (T <= t) one-tail	9.78E-06*
t Critical one-tail	1.782288
P (T <= t) two-tail	1.96E-05
t Critical two-tail	2.178813

Table 6. t-Test: Paired Two Samples for Means
values after 30 days (D_{30}) compared to values
after 60 days (D_{60}) in Wrinkle Length

	Values
Mean for D_{30}	46.76154
Mean for D_{60}	41.49385
Variance for D_{30}	736.5194
Variance for D_{60}	658.5497
Observations for D_{30}	13
Observations for D_{60}	13
Pearson Correlation	0.957714
Hypothesized Mean Difference	0
df	12
t Stat	2.43021
P (T <= t) one-tail	0.01586*
t Critical one-tail	1.782288
P (T <= t) two-tail	3.17E-02
t Critical two-tail	2.178813

Table 8. t-Test: Paired Two Samples for Means
Initial values (D_0) compared to 30 days
later (D_{30}) in Wrinkle Depth

	Values
Mean for D_0	51.07154
Mean for D_{30}	45.45923
Variance for D_0	150.5414
Variance for D_{30}	131.0855
Observations for D_0	13
Observations for D_{30}	13
Pearson Correlation	0.88311
Hypothesized Mean Difference	0
df	12
t Stat	3.49545
P (T <= t) one-tail	0.002209*
t Critical one-tail	1.782288
P (T <= t) two-tail	4.42E-03
t Critical two-tail	2.178813

* The results obtained are 99% significant

IntegriACTIVE FirmLIFT - In-Vivo Wrinkle Reduction Study

Table 9. t-Test: Paired Two Samples for Means
Initial values (D_0) compared to 60 days
later (D_{60}) in Wrinkle Depth

	Values
Mean for D_0	51.07154
Mean for D_{60}	43.65
Variance for D_0	150.5414
Variance for D_{60}	132.6325
Observations for D_0	13
Observations for D_{60}	13
Pearson Correlation	0.903596
Hypothesized Mean Difference	0
df	12
t Stat	5.074038
P (T <= t) one-tail	0.000137*
t Critical one-tail	1.782288
P (T <= t) two-tail	0.000273
t Critical two-tail	2.178813

Table 10. t-Test: Paired Two Samples for Means
Initial values (D_0) compared to 30 days
later (D_{30}) in Wrinkle Number

	Values
Mean for D_0	88.30769
Mean for D_{30}	78
Variance for D_0	337.5641
Variance for D_{30}	228.6667
Observations for D_0	13
Observations for D_{30}	13
Pearson Correlation	0.890532
Hypothesized Mean Difference	0
df	12
t Stat	4.398371
P (T <= t) one-tail	0.000434*
t Critical one-tail	1.782288
P (T <= t) two-tail	0.000868
t Critical two-tail	2.178813

Table 11. t-Test: Paired Two Samples for Means
values after 30 days (D_{30}) compared to
values after 60 days later (D_{60}) in Wrinkle Depth

	Values
Mean for D_{30}	45.45923
Mean for D_{60}	43.65
Variance for D_{30}	131.0855
Variance for D_{60}	132.6325
Observations for D_{30}	13
Observations for D_{60}	13
Pearson Correlation	0.948374
Hypothesized Mean Difference	0
df	12
t Stat	1.767636
P (T <= t) one-tail	0.051258**
t Critical one-tail	1.782288
P (T <= t) two-tail	0.102516
t Critical two-tail	2.178813

Table 12. t-Test: Paired Two Samples for Means
Initial values (D_0) compared to 60 days
later (D_{60}) in Wrinkle Number

	Values
Mean for D_0	88.30769
Mean for D_{60}	73.07692
Variance for D_0	337.5641
Variance for D_{60}	187.0769
Observations for D_0	13
Observations for D_{60}	13
Pearson Correlation	0.840867
Hypothesized Mean Difference	0
df	12
t Stat	5.436744
P (T <= t) one-tail	7.54E-05*
t Critical one-tail	1.782288
P (T <= t) two-tail	0.000151
t Critical two-tail	2.178813

* The results obtained are 99% significant

** The results obtained are 95% significant

IntegriACTIVE FirmLIFT - In-Vivo Wrinkle Reduction Study

Table 13. t-Test: Paired Two Samples for Means Values after 30 days (D_{30}) compared to values after 60 days (D_{60}) in Wrinkle Number

	Values
Mean for D_{30}	78
Mean for D_{60}	73.07692
Variance for D_{30}	228.6667
Variance for D_{60}	187.0769
Observations for D_{30}	13
Observations for D_{60}	13
Pearson Correlation	0.91541
Hypothesized Mean Difference	0
df	12
t Stat	2.91512
P (T <= t) one-tail	0.006479*
t Critical one-tail	1.782288
P (T <= t) two-tail	0.012957
t Critical two-tail	2.178813

Table 14. t-Test: Paired Two Samples for Means Initial values (D_0) compared to 60 days later (D_{60}) in Wrinkle Area

	Values
Mean for D_0	0.592846
Mean for D_{60}	0.435615
Variance for D_0	0.065235
Variance for D_{60}	0.048598
Observations for D_0	13
Observations for D_{60}	13
Pearson Correlation	0.962322
Hypothesized Mean Difference	0
df	12
t Stat	7.668431
P (T <= t) one-tail	2.89E-06*
t Critical one-tail	1.782288
P (T <= t) two-tail	5.78E-06
t Critical two-tail	2.178813

Table 15. t-Test: Paired Two Samples for Means initial values (D_0) compared to 30 days later (D_{30}) in Wrinkle Area

	Values
Mean for D_0	0.592846
Mean for D_{30}	0.478615
Variance for D_0	0.065235
Variance for D_{30}	0.053203
Observations for D_0	13
Observations for D_{30}	13
Pearson Correlation	0.9543
Hypothesized Mean Difference	0
df	12
t Stat	5.318324
P (T <= t) one-tail	9.14E-05*
t Critical one-tail	1.782288
P (T <= t) two-tail	0.000183
t Critical two-tail	2.178813

Table 16. t-Test: Paired Two Samples for Means Values after 30 days (D_{30}) compared to values after 60 days later (D_{60}) in Wrinkle Area

	Values
Mean for D_{30}	0.478615
Mean for D_{60}	0.435615
Variance for D_{30}	0.053203
Variance for D_{60}	0.048598
Observations for D_{30}	13
Observations for D_{60}	13
Pearson Correlation	0.996459
Hypothesized Mean Difference	0
df	12
t Stat	7.194907
P (T <= t) one-tail	5.47E-06*
t Critical one-tail	1.782288
P (T <= t) two-tail	1.09E-05
t Critical two-tail	2.178813

* The results obtained are 99% significant

IntegriACTIVE FirmLIFT - In-Vivo Wrinkle Reduction Study

Discussion:

The results indicate that IntegriACTIVE FirmLIFT is capable of reducing the overall appearance of wrinkles by minimizing their depth, length, number and area.

After 30 days we were able to see a 27% reduction in wrinkle length, a 13% reduction in depth, a 15% reduction in the number of wrinkles present as well as a 21% improvement in overall wrinkle surface area.

The results also suggest that continued application of IntegriACTIVE FirmLIFT will further enhance anti wrinkle benefits.

After 60 days we were able to see a 36% reduction in wrinkle length, a 17% reduction in wrinkle depth, a 19% reduction in the number of wrinkles and a 30% improvement in overall wrinkle surface area. These findings suggest that IntegriACTIVE FirmLIFT is capable of providing potent short and long term anti wrinkle benefits.

To further support these findings, statistical analysis was conducted to determine the significance of the results. Three different t-tests were performed for each of the wrinkle characteristics that were measured: length, depth, number and area. The first test compared the baseline values with the values obtained after 30 days of applying the tested sample. The second tests compared the baseline values with the values obtained after 60 days of applying the tested sample. The third tests compared the values obtained after 30 days of applying the tested sample with those of 60 days.

Based on the p-values obtained we can confirm with 99% confidence that IntegriACTIVE FirmLIFT is capable of significantly reducing the overall appearance of wrinkles. We can also confirm that it is capable of providing continued anti wrinkle benefits to achieve long term results. For this reason we are confident that IntegriACTIVE FirmLIFT is perfect for use in cosmetic applications designed to significantly minimize the overall appearance of wrinkles as is supported by our findings that it is capable of reducing their length, depth, number and area.

IntegriACTIVE FirmLIFT - Collagen I Synthesis Study

Abstract:

Collagen I is a major component of the dermis and provides structure and elasticity to the skin. A series of in vitro tests were conducted within an amino acid deficient medium to determine the supplemental effects of IntegriACTIVE FirmLIFT on fibroblast cellular metabolism and collagen I synthesis. Three dose levels were compared to a control and the results were determined by an ELISA assay. These results showed that all dose levels are effective at increasing collagen I synthesis, though it is most effective at 4% because IntegriACTIVE FirmLIFT is dose dependent.

Materials and Methods:

Human fibroblasts were grown in a medium containing 10% fetal calf serum and inoculated at a concentration of approximately 6,000 cells per dish. They were incubated in a humid atmosphere containing 5% CO₂ at 38°C for 24 hours. These cells were then removed and placed into an amino acid deficient medium and supplemented with IntegriACTIVE FirmLIFT at levels of 1%, 2% and 4%. These samples were compared to a control that was placed in an amino acid deficient medium and given no supplement. Collagen I synthesis was then checked 48 hours later. Collagen I synthesis was determined by immunolabeling with primary and secondary antibodies (murine anti-collagen I monoclonal antibody and murine anti-IgG antibody) in a peroxidase / TMB substrate (3,3', 5,5'-tetramethylbenzidine) visualization system.

Results:

Increase in collagen I synthesis is expressed by the following formula:

$$\frac{(\text{Collagen Synthesis} - \text{Control})}{\text{Control}} \times 100 = \% \text{ Increased in Collagen I}$$

Treatments	Collagen I (ng/ml)	Increase
Control	37	--
IntegriACTIVE FirmLift 1%	56	51.4%
IntegriACTIVE FirmLift 2%	75	102.7%
IntegriACTIVE FirmLift 4%	88	137.8%

Table 1. Effects of IntegriACTIVE FirmLIFT on Collagen I Synthesis by Human Fibroblast Cells

Collagen I Synthesis

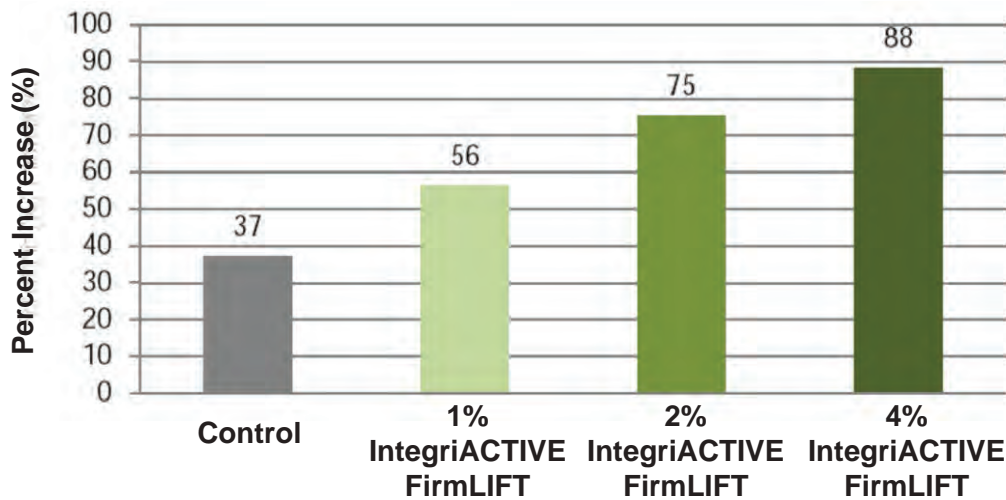


Figure 1. Effects of IntegriACTIVE FirmLIFT Collagen I by Human Fibroblast Cells

Discussion:

Collagen I is a major component in the human dermis and provides structure and elasticity to the skin. According to the results, IntegriACTIVE FirmLIFT is capable of significantly increasing collagen I synthesis at the 3 concentrations tested. The results were significantly higher than those showed by the control.

When used at 1%, IntegriACTIVE FirmLIFT increased collagen I by 51.4%; when used at 2% it increased collagen I synthesis by 102.7% and by 157.1% when used at 4%.

The data displays that a 4% concentration is the most effective in boosting synthesis of collagen I by fibroblast cells, as the results are dose dependent. For this reason, IntegriACTIVE FirmLIFT is perfectly suitable for cosmetic applications designed to boost collagen synthesis to help provide a younger and healthier looking complexion.

IntegriACTIVE FirmLIFT - Fibroblast Revitalization After UV Damage

Abstract:

The purpose of this study was to determine the effects of IntegriACTIVE FirmLIFT on fibroblast cellular revitalization after UV damage. Fibroblasts are connective tissue cells that secrete collagen, glycoproteins and other macromolecules and are ultimately important in the health and maintenance of the skin. Our technical staff conducted a series of tests in vitro within an amino acid deficient medium to determine the supplemental effects on cellular revitalization, thus compensating for nutritional deficiencies and determining the nutritional advantages of IntegriACTIVE FirmLIFT. Two dose levels were compared to two controls and the results showed that dose levels of both 2% and 4% are effective at increasing fibroblast cell recovery after UV damage.

Materials and Methods:

Human fibroblast cells were grown in a medium containing 2% and 4% IntegriACTIVE FirmLIFT for 72 hours. These cells were then subjected to UV stress (UVA at 5.5 Joules/cm²; UVB at 0.35 Joules/cm²). One control was irradiated without being given any supplement; the other control was not irradiated. Cellular revitalization was then measured 72 hours after UV exposure. Results were determined by staining the cells and measuring absorbance at 550nm.

Results:

Cell revitalization is expressed by the following formula:

$$\frac{(\text{Absorbance after UV} - \text{Irradiated Control}) \times 100}{(\text{Non-Irradiated Control} - \text{Irradiated Control})} = \% \text{ Revitalization}$$

Treatments	Absorbance	% Revitalization
Control (non-irradiated)	1.25	--
Control (irradiated)	0.29	--
IntegriACTIVE FirmLift 2%	0.48	19.8%
IntegriACTIVE FirmLift 4%	0.67	39.6%

Table 1. Effects of IntegriACTIVE FirmLIFT on Cell Revitalization After UV Stress

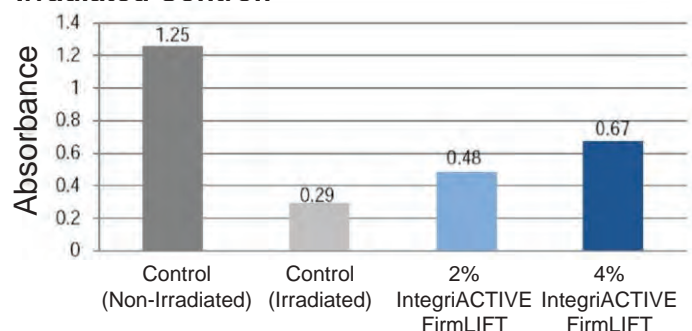


Figure 1. The Effects of IntegriACTIVE FirmLIFT on Cellular Recuperation After UV Stress

Discussion:

Sun overexposure causes damage to the skin cells and is the leading cause of extrinsic aging. In this study, the irradiated control showed a death rate of 76.8% of cells in comparison to that of the non-irradiated control. In vitro after 72 hours, IntegriACTIVE FirmLIFT at a concentration of 2% showed a 19.8% increase in cell revitalization and a 39.6% increase at the 4% level.

Therefore, IntegriACTIVE FirmLIFT may increase fibroblast cell revitalization from the sun's damaging UV rays which may help reduce the damage and decrease some signs of extrinsic aging.



IntegriACTIVE FirmLIFT - Frequently Asked Questions

1. At what temperature can IntegriACTIVE FirmLIFT be added into a formulation?

◦ 40° C or Less

2. At what pH range can IntegriACTIVE FirmLIFT be added into a formulation?

◦ Between 4 and 7

3. What are the advantages of using small and large peptides?

◦ The large peptides adhere to the skin and stay on the surface, creating a film that provides immediate tightening and lifting benefits. The smaller sized peptides can be readily absorbed and therefore are capable of priming the skin with essential nutrients that provide longer term anti-aging benefits.

4. Is IntegriACTIVE FirmLIFT water soluble or oil soluble?

◦ It is water soluble, however it's manufacturing process utilizes a combination of enzymatic hydrolysis and cross-linking. Cross-linking increases the quantity of hydrophobic groups on protein chains, which favors hydrophobic interactions and increases the affinity for skin lipids.

5. What is the origin of IntegriACTIVE FirmLIFT?

◦ IntegriACTIVE FirmLIFT is of plant origin and given that the manufacturing process utilizes a combination of enzymatic hydrolysis and cross-linking this may reduce the risk of allergic reactions.

6. Is IntegriACTIVE FirmLIFT capable of providing immediate perceivable benefits?

◦ YES, IntegriACTIVE FirmLIFT is capable of providing immediate toning, smoothing and anti- wrinkle effects. This was shown by conducting several in-vivo studies.

7. What is the advantage of using peptides instead of individual amino acids?

◦ Peptides have specific biological functions, such as assisting in enzymatic pathways. Though individual amino acids are even smaller in particle size, amino acids act as nutritional building blocks and are not actively functional.

8. Can IntegriACTIVE FirmLIFT be used to increase lift on other parts of the body such as thighs, bust or forearms?

◦ YES, IntegriACTIVE FirmLIFT can be used in any part of the body. In fact a study conducted on 13 volunteers showed an increase in skin lifting in thighs, forearms and bust in addition to the face.

9. What is the advantage of using IntegriACTIVE FirmLIFT over other peptide products on the market?

◦ Unlike other peptides on the market, IntegriACTIVE FirmLIFT contains both small and large peptides to create a dual effect providing both immediate and longer term results. These peptides are created from natural ingredients that have excellent consumer recognition and acceptance (Rice and Sweet Almond). As an added benefit, numerous efficacy tests (in-vivo and in-vitro) have been conducted to evaluate the efficacy of this unique ingredient and they have all provided excellent results.

Integrity Ingredients Corporation

“Your Innovation Partner”

“Advancing the *Beauty with a Conscience* Movement”



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