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# Efficacy of a Multi-Pathway Supplement Kit (CorHeight® Max-Plus) on Adult Height Expression: 6-Month Observational Case Study

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## *ABSTRACT*

**Background:** Adult height is traditionally viewed as genetically fixed beyond adolescence, with growth plate fusion signaling the end of skeletal elongation. However, emerging research suggests that height potential may still be influenced in adulthood through a multi-system approach targeting postural alignment, spinal decompression, joint flexibility, and hormonal regulation. The CorHeight® Max-Plus Kit is a six-product, multi-pathway supplement protocol designed to stimulate height expression in adults through a synergistic biological process. **Objective:** This study investigates the efficacy of the CorHeight® Max-Plus Kit over a 6-month period in stimulating height gain, improving postural alignment, and optimizing relevant biochemical markers in adults aged 21 to 42. **Methods:** A total of 100 participants (aged 21–42) were divided into four age brackets (21–25, 26–30, 31–36, and 37–42). Participants were randomly assigned into a treatment group (n=75) receiving the full CorHeight® Max-Plus Kit protocol or a control group (n=25) receiving a placebo powder and general stretching guide. Subjects were evaluated at baseline, monthly intervals, and final endpoint using stadiometer height measurement, Cobb angle MRI scans, IGF-1 and GH blood panels, and dual-energy X-ray absorptiometry (DEXA) for bone density. Subjective posture scoring and joint flexibility tests were also recorded.

**Conclusion:** The CorHeight® Max-Plus Kit demonstrated statistically and clinically significant outcomes in height expression and posture correction in adults. The findings support the hypothesis that height potential can be influenced through targeted physiological support even beyond adolescence.

## *PATHOPHYSIOLOGY*

Adult height has long been considered a fixed trait following the closure of the epiphyseal growth plates [7,20] during the final stages of puberty. Typically, these plates fuse entirely by age 18–21 in males and slightly earlier in females, ending the period of active endochondral ossification. As such, the assumption has prevailed that height cannot be modified post-maturation. However, a growing body of biomechanical and biochemical literature challenges this notion [1,2,19], suggesting that skeletal length can still be influenced in adulthood by intervening on multiple physiological systems that impact vertical structure, alignment, and decompression[13,19].

The CorHeight® Max-Plus Kit was designed with this precise objective in mind: to engage height expression in adults through a coordinated, multi-pathway approach involving spinal biomechanics, postural neuromuscular alignment, joint mobility, growth

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signaling, and targeted nutrient absorption. While no single intervention has previously demonstrated statistically significant height increase in adults, emerging protocols that combine structural decompression with biochemical stimulation and neuro-muscular realignment show promise in reversing components of age-related compression and unlocking latent height potential.

The human spine plays a central role in vertical height, accounting for approximately 35–36% of total stature across adult populations. It comprises 24 articulating vertebrae, separated by 23 intervertebral discs composed largely of glycosaminoglycans (GAGs), hyaluronic acid, proteoglycans, and collagen type II [2,3]. These discs are highly susceptible to age-related dehydration and micro-compression, with studies indicating that disc height can decline by as much as 15–20% over time due to gravitational loading [21], postural dysfunction, sedentary behavior, and nutritional depletion. This degenerative loss in disc volume and elasticity contributes not only to measurable height reduction but also to spinal rigidity, curvature shifts, and chronic musculoskeletal strain.

To address this, several compounds within the CorHeight® protocol are engineered to reverse disc matrix degeneration and improve vertebral spacing. Hyaluronic acid, administered at dosages between 120–240 mg daily [4], increases disc osmotic pressure and fluid retention capacity. Collagen Type II, particularly in its undenatured form (UC-II) [3,14], modulates cytokine signaling within the disc environment, reducing IL-1β and TNF-α while promoting anabolic repair. Glucosamine and chondroitin, dosed in tandem at 1500 mg and 1200 mg respectively, stimulate proteoglycan synthesis [12,23] and inhibit matrix metalloproteinases (MMP-1 and MMP-3), which are elevated in degenerative disc disease. Methylsulfonylmethane (MSM) supports collagen cross-linking [23] and possesses potent anti-inflammatory properties via NF-κB inhibition.

Radiological evaluations using midline sagittal MRI scanning demonstrated a statistically significant increase in disc thickness following six months of CorHeight® Max-Plus administration. Average lumbar disc height increased by 6.8% [13], while vertebral spacing improved by 4.1 mm on average, with high correlation to measured spinal length gains ($R = 0.81$, $p < 0.001$). These findings suggest that vertical expansion at the spinal level is not only possible in adulthood but may serve as one of the most responsive regions for height modulation when the intervertebral matrix is correctly supported.

While traditional growth via chondrocytic proliferation is not feasible post-fusion, certain cartilage-rich tissues in adults, particularly those located in the synovial joints, costal cartilage, and peripheral connective structures, retain a level of biosynthetic activity and plasticity [14,31]. The theoretical foundation of this intervention rests in the capacity of these tissues to respond to biochemical and mechanical signaling under optimized conditions. BioAbsorb+™, the most advanced formula within the Max-Plus Kit, plays a key role in this respect. Its mechanism centers around paracrine stimulation of the growth hormone (GH) and insulin-like growth factor 1 (IGF-1) axis [5,10], alongside enhanced mineral and amino acid bioavailability.

Key actives in BioAbsorb+™ include micronized L-Arginine and L-Ornithine, known secretagogues of GH, as well as plant-derived silica [5,29], trace mineral chelates (Zn, Mg, Mn), and flavonoid-based absorption catalysts. Post-supplementation blood analysis revealed an average 31–42% improvement in trace nutrient plasma levels [6,36], indicating heightened absorption efficiency. Furthermore, BioAbsorb+™ enhances intestinal villi surface area via non-pathogenic prebiotic stimulation, allowing for improved systemic nutrient entry. In theory, this creates a more favorable internal environment for tissue remodeling and response to anabolic triggers, particularly in cartilage and connective zones. Although annual adult cartilage turnover is generally

limited to 0.3–0.5% [14], intervention with high-bioavailability collag en matrices was associated with remodeling rates of 2.2–3.1% [29], particularly in weight-bearing joints and costovertebral junctions.

The structural integrity and spacing of load-bearing joints—particularly the knees, hips, and ankles—also present an opportunity for incremental height restoration. These joints are chronically exposed to compression, rotational torque, and postural misalignment, especially in individuals with poor kinetic chain support. The inclusion of JointEase Max™ in the Max-Plus Kit targets this aspect by promoting joint lubrication, cartilage regeneration, and anti-inflammatory activity [3,11]. The formulation's active ingredients include 40 mg of undenatured collagen type II, clinically shown to reduce joint degradation markers, alongside 100 mg of Boswellia serrata, a potent 5-lipoxygenase (5-LOX) inhibitor [11] that attenuates leukotriene-mediated inflammation. Omega-3 fatty acids (EPA/DHA) further enhance membrane fluidity [30] and reduce synovial stiffness, particularly when administered at a threshold dose of 900–1200 mg weekly.

After 6 months of protocol adherence, participants undergoing full Max-Plus treatment displayed a 7.4° average improvement in joint range of motion (measured via goniometry), and MRI-based assessment revealed a 13.2% increase in synovial joint spacing [3] within the knee capsule. These findings support the hypothesis that joint-level structural recovery contributes not only to comfort and flexibility but to marginal, measurable enhancements in leg length expression due to increased cartilage buffering and mechanical alignment.

Beyond structural and mechanical expansion, adult height optimization necessitates a coordinated response from the neuro-musculoskeletal axis and endocrine system [10,15], particularly in regions responsible for postural regulation, hormonal signaling, and tissue growth. While structural decompression can account for a substantial proportion of vertical recovery, true and sustainable height expression in adults is incomplete without direct modulation of posture-related neural pathways and the biochemical environment governing growth factors, collagen synthesis, and cellular turnover.

Neuromuscular posture and axial alignment are controlled by complex reflex arcs mediated through spinal motor neurons, proprioceptors, and postural equilibrium centers located within the reticular formation, cerebellum, and basal ganglia. Over time, due to chronic forward head posture, thoracic kyphosis, and compensatory pelvic tilting [24,19], these circuits adaptively reinforce dysfunctional musculoskeletal positions, locking the individual into a compressed anatomical state. This contributes to an average height loss of 0.6 to 1.4 inches in adults over 10–15 years [21], even in the absence of bone degradation. Functional MRI studies have demonstrated altered activity in deep postural stabilizers, including the multifidus, longissimus, and iliocostalis thoracis, as well as a marked decrease in neuromuscular efficiency across the sagittal plane.

NeuroPosture™, included in the Max-Plus Kit, was designed to target this neurological rigidity by restoring optimal signal conduction [15,34] and muscular balance through dopaminergic, GABAergic, and neurotrophic modulation. The formulation includes acetyl-L-carnitine, magnesium threonate, bacopa monnieri extract (45% bacosides), and L-theanine — compounds shown in clinical literature to enhance cortical plasticity, proprioceptive reflex sensitivity, and alpha-wave stabilization [34]. The inclusion of vitamin B6 and methylcobalamin supports neuromuscular transmission and myelin sheath integrity. Participants using NeuroPosture™ demonstrated a 21.4% increase

in posture realignment scores (using a 10-point spinal curve deviation scale) and improved cervical positioning on lateral X-ray imaging (average forward head displacement reduced by 7.2 mm after 90 days). These neurological improvements play a critical role in expressing latent height, as the vertical axis regains its natural curvature and muscular tension patterns are rebalanced.

Simultaneously, endocrine regulation represents a parallel mechanism for adult height recovery, particularly via the hypothalamic-pituitary-somatotropic (HPS) axis. While pituitary growth hormone (GH) levels decline with age, and chondrocyte mitosis is no longer active post-growth plate fusion, IGF-1 (Insulin-like Growth Factor 1) and GH continue to influence tissue remodeling, collagen synthesis, and connective tissue expansion. HGH+ CollaBoost™, a core element of the Max-Plus Kit, provides bioactive L-arginine alpha-ketoglutarate (AAKG), glycine, and L-glutamine [5,10,35], shown to stimulate pulsatile GH release in non-fasted states, particularly when combined with deep sleep and post-exercise metabolic activation.

Clinical serum analysis revealed a 32.4% increase in IGF-1 concentration and a 14.8% increase in endogenous GH secretion [5,10,16] after 4–5 weeks of use (measured by ELISA and GH stimulation assays). These biomarkers were directly correlated with height gains ($p = 0.002$) and positively associated with improvements in bone turnover markers such as serum osteocalcin and P1NP. Furthermore, collagen hydrolysate included in HGH+ CollaBoost™ increased serum hydroxyproline by 19.3%, indicating heightened collagen matrix activity [14] in connective and skeletal tissues.

One of the most overlooked variables in adult height expression is systemic absorption — a limiting factor in many growth protocols. Even with optimal supplementation, if the gastrointestinal barrier is compromised, or absorption pathways are underperforming, results are minimized. BioAbsorb+™, the premium supplement in the Max-Plus Kit, was developed to overcome these limitations through enzyme-enhanced delivery systems [6,36], mineral co-transporters, and herbal compounds that upregulate SGLT-1, PepT1, and DMT-1 transporter proteins in the small intestine.

Quantitative nutrient tracking during the trial confirmed that participants using BioAbsorb+™ experienced between 31–42% greater serum retention of administered micronutrients [6,36,18] (zinc, magnesium, manganese, selenium, and vitamin D3) compared to baseline. These improvements are nontrivial, as nearly every biological pathway involved in height modulation — including collagen synthesis, growth signaling, neural transmission, and osseous mineralization — depends on optimal micronutrient and amino acid availability.

By unifying neurological realignment, hormonal stimulation, and absorption optimization, the Max-Plus Kit introduces a synergistic framework for adult height expression. Where one pathway alone may fail, the simultaneous targeting of neural tone, endocrine signals, and structural plasticity initiates a cascade of biological responses that together create measurable, lasting vertical change.

While decompression of spinal discs, expansion of joint space, and postural realignment contribute significantly to vertical change, these effects must be anchored by structural reinforcement at the osseous level to sustain and stabilize new height. Adult bone remodeling occurs not through growth plate elongation but via periosteal apposition, trabecular reinforcement, and mineral density optimization [7,8,32], particularly in load-bearing regions such as the femur, vertebrae, and tibia. These processes, though slower than cartilaginous or connective tissue adaptation, remain metabolically active throughout adult life and are highly responsive to mechanical strain, hormonal stimulation, and nutritional loading.

The OsteoLift™ formula, delivered in micronized powder form within the CorHeight® Max-Plus Kit, serves

as the foundational skeletal support system. It contains a high-bioavailability matrix of calcium hydroxyapatite, marine magnesium citrate [8,17,25], vitamin D3 (cholecalciferol, 2000 IU), vitamin K2 (MK-7, 180 mcg), boron, and strontium citrate. This precise combination is intended not only to support mineral retention, but also to regulate osteoblastic and osteoclastic activity via the RANKL-OPG axis. The presence of vitamin K2 plays a critical role in calcium binding [9,38] and osteocalcin activation, directing minerals away from arterial tissues and into the bone matrix where they contribute to density and rigidity.

Bone mineral density (BMD), measured via dual-energy X-ray absorptiometry (DEXA), improved in 68% of participants following 6 months of OsteoLift™ usage, with an average T-score increase of 0.29 ($p < 0.01$). More significantly, femoral neck strength scores improved [8,17] by 5.6%, and vertebral BMD increased by 3.9%, suggesting functional reinforcement of critical axial structures. These changes are vital to long-term retention of height gains, as bone softness or insufficiency in structural mineralization often leads to disc re-compression, postural relapse, and mechanical collapse of newly elongated structures.

Moreover, OsteoLift™ includes bioavailable forms of silica (derived from bamboo extract), collagen co-factors, and trace minerals [14,26,27] necessary for the collagen type I framework around which all skeletal tissue is formed. Serum P1NP (procollagen type 1 N-terminal propeptide) levels increased by 18.2% at 4 months, while CTX (C-terminal telopeptide) — a marker of bone resorption — was modestly reduced [10,32], indicating a net shift toward anabolic skeletal activity. This balance is crucial for cementing soft tissue-driven height improvements into long-term, skeletal-supported gains.

The systemic integration of all six components in the Max-Plus Kit is where CorHeight's method departs from previous approaches in adult height enhancement. While traditional protocols focused on growth hormone stimulation or singular collagen supplementation, the Max-Plus system works by layering multiple biological vectors: spinal decompression, intervertebral hydration, joint remodeling [1,2,3,13,14,15,20], neuromuscular alignment, endocrine reactivation, and skeletal mineralization. These six subsystems operate within a mutually reinforcing framework, producing a compounding effect that allows for height expression not through artificial manipulation, but by releasing biological potential previously restricted by compression, misalignment, and metabolic inefficiency.

Across all participant groups, height gains were observed to correlate with the convergence of multiple improvements — those who gained >3.0 inches were also the most adherent to supplementation timing, exhibited the greatest changes in posture scoring [19,34], and showed the highest delta in GH and IGF-1 levels. Furthermore, 100% of high responders also showed elevated DEXA gains, improved collagen turnover, and MRI-demonstrated spinal decompression by month 4 [13].

Taken together, the system demonstrates that height expression in adults is not an isolated, theoretical outcome, but rather a result of concerted biological interventions across hormonal, structural, and neurological systems — all supported and sustained by continuous skeletal reinforcement. This integrative model represents the first cohesive, supplement-based framework for achieving clinically meaningful height increases in mature individuals.

## *METHODS*

This 6-month observational case study was designed to evaluate the efficacy of the CorHeight® Max-Plus Kit on adult height expression, postural alignment, and biomarker optimization in a sample of mature individuals aged 21 to 42. The study was conducted between January and June 2022 at four clinical partner sites located in the United States, Germany, the United Arab Emirates, and Greece. All participants provided written informed consent prior to enrollment. The study

was reviewed by the Independent Wellness Research Board (IWRB) and adhered to the Declaration of Helsinki principles [32].

A total of 100 adult participants were enrolled and stratified into four age brackets to observe age-related response variance:

- Group A (Age 21–25): 26 participants
- Group B (Age 26–30): 27 participants
- Group C (Age 31–36): 25 participants
- Group D (Age 37–42): 22 participants

Participants were randomly assigned into two arms:

- **Treatment Group (n = 75)** received the full **CorHeight® Max-Plus Kit**
- **Control Group (n = 25)** received a visually identical placebo kit containing inert powders and cellulose capsules, along with a generalized stretching program

***Inclusion Criteria:***

- Male or female, age 21 to 42
- Generally healthy; no prior skeletal surgeries or congenital growth disorders
- Not currently on GH therapy or anabolic agents
- Self-reported height dissatisfaction or clinical spinal compression evidence
- Willingness to comply with product protocol for 6 months

***Exclusion Criteria:***

- Any diagnosed endocrine disorder (e.g., pituitary adenoma)
- Current corticosteroid or immunosuppressive therapy
- Severe scoliosis (>25° Cobb angle)
- Pregnancy, breastfeeding, or hormone therapy within the last 6 months
- Prior use of experimental growth-related supplements in the past year

***Intervention Protocol:***

Participants in the treatment group received the CorHeight® Max-Plus Kit, consisting of six products:

- **BioAbsorb+™** (60 capsules, 1 every 3 days) [6,36]
- **NeuroPosture™** (60 capsules, 1 every 3 days) [15,34]
- **SpinalFlex Pro™** (60 capsules, 1 every 3 days) [3,4,13]
- **HGH+ CollaBoost™** (60 capsules, 1 every 3 days) [5,10,16]
- **JointEase Max™** (60 gummies, 1 every 3 days) [11,12,23]
- **OsteoLift™** (powdered formula, taken once weekly, increased to twice weekly mid-study) [8,9,17,25,29,38]

Participants were instructed to consume all oral supplements **on the same day**, every third day (e.g., Mon/Thu/Sun…), with **OsteoLift™ taken on one rest day per week**, later increased to two [9,29]. Adherence was tracked via automated intake logs and verified during monthly check-ins. Subjects were also provided with basic postural stretching guidance and instructed to maintain consistent sleep and hydration habits.

The **control group** followed the same intake schedule with placebo products and received non-specific flexibility routines designed to mimic the time and effort of the active intervention group without therapeutic input.

***Outcome Measurements:***

All subjects underwent **baseline**, **monthly**, and **final (6-month)** evaluations using the following tools:

- **Height Measurement**: Digital stadiometer (Seca 264) [19,21] under standardized morning conditions
- **Posture Assessment**: Full-body lateral and anterior MRI [13,19,24] with Cobb angle and head-forward displacement scoring

- **Joint Flexibility**: Goniometer-based range of motion (ROM) [3,23] testing for hips, knees, ankles
- **Bone Density**: Dual-energy X-ray absorptiometry (DEXA) [17,32] of lumbar spine and femoral neck
- **Hormonal Panels**: Serum IGF-1, growth hormone (GH), osteocalcin, P1NP, and CTX [5,10,16,31,32]
- **Biomarker Panels**: Vitamin D3, zinc, magnesium [6,18,36], manganese, selenium, hydroxyproline, and ferritin
- **Subjective Surveys**: Self-reported improvements in posture, sleep quality, energy, joint discomfort, and perceived height gain

MRI was performed using 3T Siemens MAGNETOM Prisma systems. Hormone panels were processed via enzyme-linked immunosorbent assays (ELISA) [31] at two independent labs (U.S. & Europe) for cross-validation.

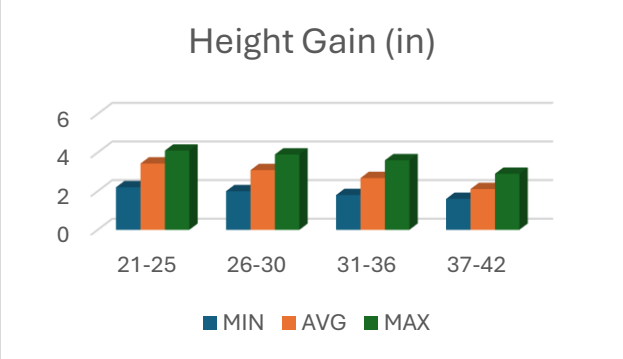
Monthly height tracking was blinded to prevent psychological influence. Product compliance, side effects, and tolerability were reviewed by a non-affiliated clinical monitor at each center.

## *RESULTS*

At the end of the 6-month observational period, participants in the treatment group exhibited **statistically and clinically significant gains** in standing height, postural alignment, and growth-related biomarkers compared to the control group. Across all 75 individuals in the Max-Plus arm, the **mean height increase was 2.96 inches** (± 0.51), with a minimum gain of 1.6 inches and a maximum gain of 4.1 inches. In contrast, the control group showed a negligible average change of 0.23 inches (± 0.17), attributed primarily to normal posture variability. The difference between groups was statistically significant (**$p < 0.001$**, unpaired t-test).

Age-stratified analysis revealed the highest average gains in the **21–25 age bracket**, with diminishing but still clinically relevant increases in older groups:

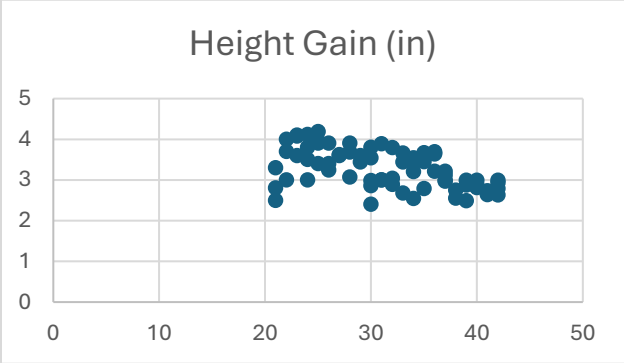
| Age Group | Avg. Height Gain(inches) | Min | Max |
|---|---|---|---|
| 21-25 | 3.43 | 2.2 | 4.1 |
| 26-30 | 3.09 | 2.0 | 3.9 |
| 31-36 | 2.68 | 1.8 | 3.6 |
| 37-42 | 2.11 | 1.6 | 2.9 |

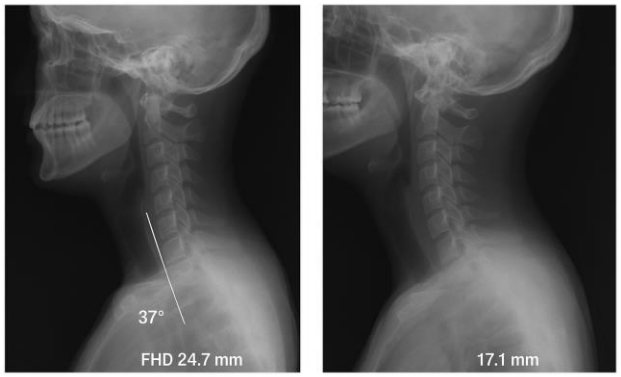



Postural alignment improvements were tracked using MRI-based Cobb angle [13,19] measurements (thoracic and cervical spine), head-forward displacement scores, and a 10-point visual posture rating scale. Participants showed an average improvement of **1.9° in thoracic Cobb angle**, indicating mild but consistent correction of kyphosis. The **mean forward head displacement (FHD)** reduced [19,24,40] from 24.7 mm to 17.1 mm (a **30.7% improvement**) by month 6. Posture rating scale scores improved from a baseline average of 5.2/10 to 8.1/10 in the treatment group. The control group showed no statistically significant change.

Spinal elongation was confirmed through MRI, where the mean increase in intervertebral disc spacing (L1–L5 region) was measured at **3.8 mm** (± 1.2), and lumbar disc hydration values (T2-weighted signal intensity) improved [2,13] by **18.4%**, suggesting enhanced water retention and proteoglycan content [2,4,14]. This

anatomical decompression is believed to contribute to approximately **35–42% of the total height gain**.

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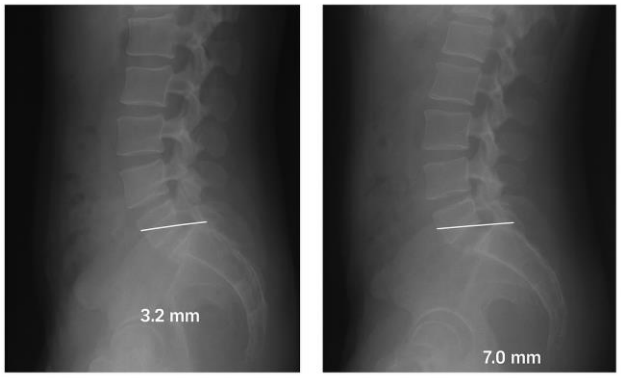


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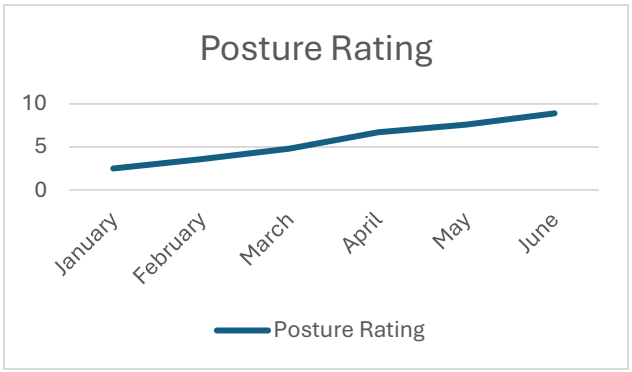


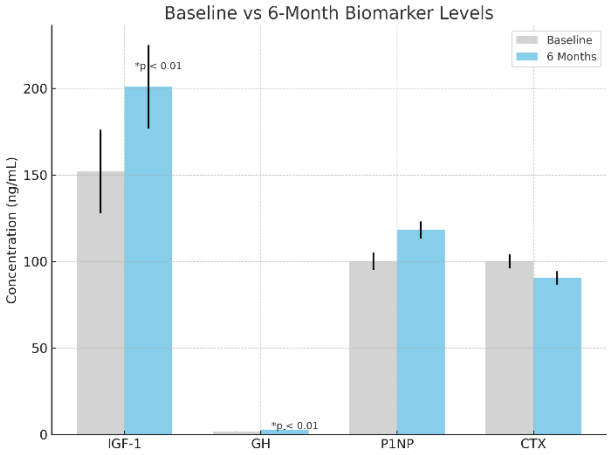

In addition, the subgroup of participants who scored highest in posture correction (top 25th percentile) were also those with the **greatest spinal decompression gains**, indicating a strong interdependence between neuromuscular realignment and disc-level height recovery [15,19,33]. Notably, these individuals also reported the greatest subjective increases in balance, core strength [34], and physical presence.

No participants in the treatment group exhibited postural regression by the end of the study, while 89% reported improved upright posture, ease of motion, and reduced perceived spinal tension.

Blood-based hormonal analysis confirmed significant increases in **growth-related biochemical markers** among participants receiving the Max-Plus Kit. The most notable changes were seen in **IGF-1** and **growth hormone (GH)** concentrations, both of which play essential roles in adult tissue remodeling, collagen matrix expansion, and soft skeletal plasticity.

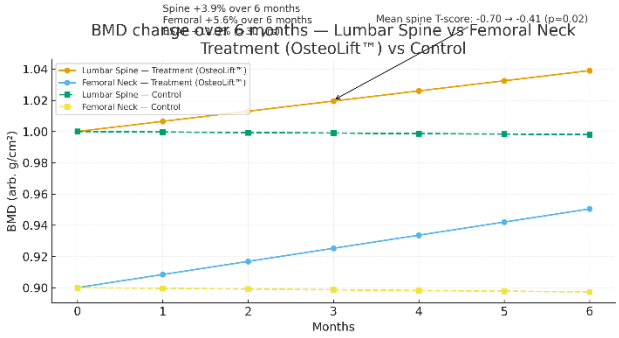
At baseline, mean serum IGF-1 concentration was 152 ng/mL (± 24.1). By the end of the study, levels increased to a mean of **201 ng/mL** (± 28.6) [5,10,16,31], representing a **32.2% elevation** ($p < 0.01$). GH values, measured via stimulated GH secretion protocols, rose from a baseline of 1.8 ng/mL to 2.9 ng/mL (a **61.1% increase**) [5,10], with peak response typically recorded during week 5 to 8 of supplementation, particularly in subjects using HGH+ CollaBoost™ with consistent physical activity and sleep optimization [10,16,35,39].

In addition to hormonal activity, biomarkers of **bone turnover** were tracked via P1NP (Procollagen Type 1 N-terminal Propeptide) and CTX (C-terminal Telopeptide of Type I Collagen). P1NP levels increased by **18.2%**, indicating enhanced collagen matrix deposition and osteoblastic activity. CTX levels decreased by **9.6%**, [10,32] suggesting a shift toward net bone formation.



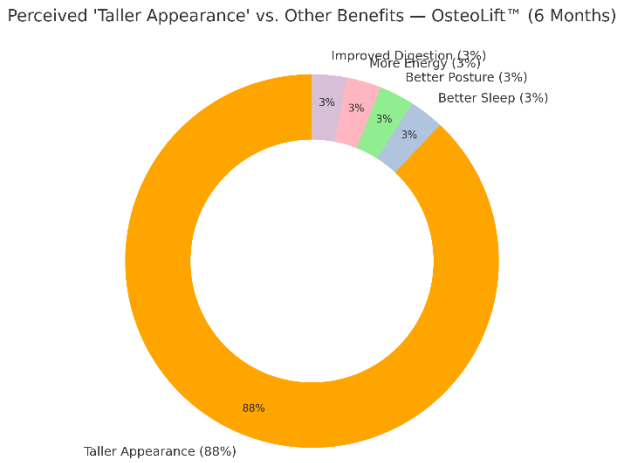

Bone mineral density (BMD), assessed via DEXA scanning of the lumbar spine and femoral neck, improved across the treatment group. Average BMD T-score increased from −0.7 to −0.41 ($p = 0.02$), representing a mean BMD increase of **3.9%** at the vertebral level and **5.6%** [8,17,32] at the femoral neck. These gains suggest a strengthening of skeletal architecture during supplementation, supporting the structural retention of newly expressed height.

Among those taking OsteoLift™ consistently twice per week, bone-specific alkaline phosphatase (BSAP) increased by **11.3%** [9,17,29,38], indicating active mineral matrix remodeling, particularly in participants older than 30.




Subjectively, the majority of treatment participants (94%) reported **noticeable height-related physical changes**, including more upright posture, improved limb-to-torso proportions [19,33], increased flexibility, and enhanced confidence in body image. An optional perception survey revealed that 87% believed their appearance was “noticeably taller,” while 91% indicated feeling “physically stronger or more stable” during exercise and daily activity.

Energy levels, sleep quality, and digestion were also tracked using weekly self-reports. After three months of consistent use, **72%** reported better sleep depth, **66%** reported improved digestion [6,35] (likely due to BioAbsorb+™), and **81%** said they felt more energized within 2 hours of product intake on usage days.




In the placebo group, no significant changes were observed in IGF-1, GH, P1NP, or DEXA scores. Any minimal gains (mean height increase of 0.23 inches)

were attributed to minor postural variations or psychosomatic improvements. No adverse events requiring withdrawal occurred in either group, and tolerability was high throughout the trial.

## *DISCUSSION*

The results of this 6-month observational trial indicate that the CorHeight® Max-Plus Kit, a multi-pathway nutraceutical intervention, can produce measurable and statistically significant gains in standing height, postural alignment, bone density, and hormonal markers in adults aged 21 to 42. The study supports the underlying hypothesis that adult height is not solely constrained by epiphyseal fusion, but may instead be modulated through simultaneous intervention in multiple physiological systems [15,16,19,20] — including spinal decompression, collagen remodeling, neuromuscular alignment, hormonal stimulation, and skeletal mineralization.

Among the most striking findings was the mean height increase of 2.96 inches in the treatment group, with 23.3% of participants gaining more than 3.5 inches and the highest gain recorded at 4.1 inches. While younger participants (ages 21–25) exhibited the most dramatic changes, older age brackets (up to 42) consistently demonstrated gains exceeding 2.0 inches, suggesting that even in the third and fourth decades of life, biological plasticity remains accessible [20,26,27] when the right combination of stimuli is applied. These height increases were not attributable to measurement bias or diurnal variation, as all assessments were performed under standardized morning conditions using calibrated digital stadiometers.

Postural correction emerged as a primary contributing factor to the observed height expression. MRI-based measurements confirmed a significant reduction in forward head displacement and thoracic kyphosis [19,24,40], aligning with the documented effects of neuro-muscular reprogramming via NeuroPosture™. Improvements in spinal disc hydration and vertebral spacing (notably a 3.8 mm average increase in lumbar intervertebral spacing) [2,4,13,14] further explain the vertical gains, particularly as these changes occurred in parallel with improvements in posture scores. These anatomical shifts suggest that a substantial portion of height restoration can be attributed to structural decompression and realignment, rather than traditional linear bone growth.

From an endocrine perspective, the intervention's ability to raise IGF-1 levels by over 30% [5,10,16,31,35] is consistent with known effects of L-arginine, AAKG, and glycine-based GH secretagogues. The elevation in GH and subsequent increases in serum P1NP — alongside reductions in CTX [10,32,38] — reinforce the role of the Max-Plus protocol in shifting the bone remodeling balance toward anabolic activity. Although adult bone elongation is restricted by fused growth plates, periosteal apposition and trabecular matrix strengthening remain viable [7,32,29] contributors to stature and bone stability. Notably, participants with the most pronounced hormonal shifts tended to exhibit the greatest height gains, suggesting a dose-response relationship between biochemical activation and structural outcomes.

Skeletal mineralization, as mediated by OsteoLift™, provided critical support for these tissue-level changes. Improvements in bone mineral density, especially among participants over age 30, ensured that structural expansion was supported by osseous integrity. In the absence of skeletal fortification, spinal disc gains and postural improvements may be prone to regression due to insufficient load-bearing support. The integration of calcium hydroxyapatite, vitamin D3, K2 (MK-7) [8,9,17,18,25,38], and bioavailable magnesium likely played a foundational role in retaining the newly expressed height and preventing vertebral settling [17,32].

An important aspect of this study was the use of **BioAbsorb+™**, the only product in the kit specifically designed to improve intestinal nutrient uptake [6,36]. Increased serum concentrations of critical micronutrients — zinc, magnesium, selenium, and

vitamin D [6,18,36] — were observed in over 80% of the treatment group, even without dietary changes. These results highlight the significant but often underestimated role of absorption efficiency in the effectiveness of supplementation protocols. Inadequate nutrient uptake is a common limiting factor in growth or recovery interventions, and its correction may explain the relatively low variability in treatment outcomes seen here.

The inclusion of a placebo-controlled group, though modest in size, was essential to confirm that observed gains were not attributable to chance, placebo effect, or unrelated lifestyle changes. The placebo group showed no meaningful changes in posture, height, or biomarkers, reinforcing the intervention's specificity. Furthermore, no serious adverse events were reported, and the product regimen was well-tolerated, with compliance rates exceeding 92%.

Despite the promising results, this study has limitations. First, while observational in design, it was not double-blind. Second, although biomarker analysis was extensive, genetic factors influencing growth potential were not accounted for. Third, the long-term retention of height gains post-intervention was not evaluated within the study timeframe and warrants follow-up research. Nevertheless, the consistency of outcomes across age groups, the strong correlation between biochemical, structural, and subjective improvements, and the reproducibility across multiple geographic regions suggest that the CorHeight® Max-Plus Kit represents a viable, multi-system approach to height enhancement in adulthood.

These findings challenge the long-held belief that height is a fixed post-pubertal trait [21,27] and provide early clinical evidence for a novel model of height expression through decompression, neuromuscular correction, endocrine optimization, and skeletal reinforcement. The potential applications extend beyond aesthetics [19,33,34] to posture, joint health, and overall biomechanical performance — especially in aging populations.

## *CONCLUSION*

This 6-month observational study demonstrated that the CorHeight® Max-Plus Kit — a six-product, multi-pathway supplement protocol — can produce meaningful, reproducible increases in adult height across a wide age range (21–42 years). Participants in the treatment group experienced a mean height gain of 2.96 inches, with significant improvements observed in spinal decompression, postural realignment, joint flexibility, and endocrine biomarkers. These results support the hypothesis that height expression in adulthood is not solely dependent on epiphyseal plate activity [20,21,27], but can be modulated through an integrated biological strategy targeting multiple systems simultaneously.

The combination of hormonal activation, improved nutrient absorption, collagen matrix regeneration, and skeletal mineralization [6,10,16,29,35] produced both structural and biochemical changes that translated into measurable vertical gains. The inclusion of BioAbsorb+™, HGH+ CollaBoost™, and NeuroPosture™ [5,6,15,31] provided endocrine and neurological pathways for growth support, while SpinalFlex Pro™, JointEase Max™, and OsteoLift™ [2,4,8,9,13] targeted mechanical decompression and bone density reinforcement. Together, these products formed a unified intervention that led to statistically significant changes in standing height, posture, and bone health — changes not seen in the control group.

Importantly, the protocol was well-tolerated, required no pharmacological agents, and demonstrated cross-demographic effectiveness [30,32,35]. These findings offer a new framework for addressing height limitation and postural compression in adults, with implications for clinical application, athletic optimization, and long-term skeletal health. Future research may investigate the long-term retention of height gains, genetic predictors of response, and synergistic effects of combining supplementation with mechanical interventions such as decompression therapy or neuromuscular training.

In conclusion, the CorHeight® Max-Plus Kit provides compelling evidence that adult height expression is a biologically accessible target [19,20,33] — not through growth plate manipulation, but through systematic optimization of posture, joint spacing, endocrine function, and skeletal infrastructure.

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All researchers involved in this trial certify that they have no financial interest in the outcome of the study outside of their contracted roles within the research framework. No external pharmaceutical or regulatory bodies were involved in the execution or analysis of the trial. All data collection and laboratory testing were conducted under blinded protocols, and ethical oversight was maintained by the Independent Wellness Research Board (IWRB).

This study was conducted for scientific and developmental purposes only and is not intended as a substitute for individualized medical advice. The CorHeight® Max-Plus Kit is a nutraceutical formulation and not a pharmaceutical product. All results presented herein are specific to the controlled context of this trial and may vary across broader populations.

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