



A REVIEW ARTICLE ON STRENGTH IN AYURVEDA AND ITS DEVELOPMENT

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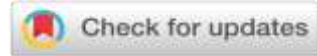
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ABSTRACT

Ayurved has given importance to strength by stating that health is directly proportional to the strength of an individual. Today's competitive era has increased speed of life. People are running with life irrespective of their health. It ultimately leads to various lifestyle disorders and deterioration of the strength. Hence this is the time to inculcate people about importance of strength. A good strength leads to healthy life and avoids physical worsening. Ayurvedic directives of *Ahara* and *Vihara* will improve the strength i. e. *Yuktikrita Bala*.

Keywords: *Ahara*, *Vihara*, development of strength

INTRODUCTION

Ayurved has given importance to strength by stating health is directly proportional to the strength of an individual.

बलाधिष्ठानमारोग्यम्¹ Ch. Chi. 3/142

Hence Ayurved has explained many fundamental principles in detail to maintain strength & health. Strength is required for healthy life.

Today lifestyle has been changed. Travelling long distance, sedentary work, stress are watchwords today. People need physical & mental strength to face daily challenges. Now Indian diet culture is threatened by fast food. Unwholesome dietary habits and regimen like excessive intake of hot & cold beverages are affecting strength & health of people badly. Many serious diseases are appearing in early ages.

Thus people require good strength to remain healthy & to do their daily work properly & avoid physical worsening.

Hence it is important to inculcate people about strength and its development described in Ayurved.

Aims and objectives-

1. To study strength in Ayurved.
2. To study factors responsible for development of strength.

Material and Methodology-

- A. **Material** – *Bruhatrayi* & books of modern science & necessary references from net.
- B. **Methodology**- Literary study of strength & its development from *Bruhatrayi*.

Concept of Bala- According to Ayurveda, *Bala* is not only physical strength but all those elements which maintain health of the body, by performing their important functions properly.

e. g. *Vayu* - वायुः आयुः बलं | *Ch. Chi.* 28/3

Shleshma,- प्राकृतस्तु बलं श्लेष्मा..... | *Ch. Su.* 17/117

Ojas - तत् खलु ओजः तत् एव बलं इति उच्यते | *Su.* 15/24

Udana Vayu - उदानो बलमुच्यते | *Ah. Hru. Ni.* 16/56

Thus *Vayu*, *Udana Vayu*, *Kapha Dosha*, & *Ojas* described as *Bala*.

Types of strength- Strength is mainly divided into two types-

1. **Sharira Bala./ Physical strength** - It depends upon state of body elements such as, *Dosha*, *Dhatu*, *Mala* etc.

2. **Manasa Bala / Mental strength** - It depends upon *Manasa Guna* i.e. *Satva*

Both Strengths are assessed as- *Uttama*, *Madhyama* & *Hina*.

Ayurveda has described **Physical strength in 3 types** (*Trividha Bala*²) -

1. **Sahaja Bala** – i.e. Inherent strength- which individual can get by birth. It depends upon diet and regimen followed by mother during pregnancy and *Beejsampat* (normal gametes) It remain unchanged in life.
2. **Kalaja Bala** - i.e. Temporal strength- which individual attain according to age & season.

e.g. Strength is higher in young age and in *Visargkala* (season of high strength i.e. *Varsha*, *Sharada* & *Hemanta*) and cold season.

3. **Yuktikrita Bala** – i.e. Acquired strength- It is obtained by proper diet, regimen & specific medicine i. e. *Rasayana*.

Sahaja Bala- Individual should accept as it is.

Kalaja Bala- Its effect is unavoidable.

Yuktikrita Bala is the only strength which can be developed by modifying food and exercise.

Strength (*Bala*) starts to develop in the sixth month of intrauterine life. Hence diet & regimen of Mother have direct effect on inherent strength of the foetus.

Physical strength of an individual is depend upon strength of *Dhatu*s.

*Dhatu*s are responsible for *Dharana* i.e. holding body properly. Manifestation of diseases occurs only when *Dhatu Bala* becomes less than *Bala* of vitiated *Doshas*. Vitiated *Doshas* are unable to create disease unless & until they encounter ‘*Kha-vaigunya*’/ *Daurbalya* in any *Srotas* of *Dhatu*s. Thus lower strength is the main reason in manifestation of disease and weakness; while higher *Dhatu Bala* shows higher physical performance. *Dhatu Bala* plays important role in maintenance of strength. Each *Dhatu* has its own specific function. All *Dhatu*s are interconnected with each other by their physiological development. Previous *Dhatu* develops next *Dhatu*. Hence weakness of any one *Dhatu* surely affects production of another *Dhatu* & ultimately strength.

Balavardhaka Bhava³- i. e. factors responsible for improvement of strength are described by *Charakacharya*.

1. To be born in the land of healthy people.
2. To be born in the healthy season.
3. To achieve “*Sukhakar Kala*” which avoids decline in the strength.
4. Development of foetus with normal gametes.
5. Habitual intake of healthy food i.e. *Balya*, *Brihan*, *Ahara*
6. Well-built physic.
7. Ability to accept different types of diet.
8. Excellent / healthy mind.

9. Efforts made to improve the strength without any disturbance.
10. Young age.
11. All *Karmas* i.e. verbal, mental and physical actions useful to improve strength.
12. Mind which is free from worry & has tendency to remain happy.

Role of Ahara, Vihara & Aushadha –

Ahara is stated as “*Mahabhaishajya*⁴” (the best medicine) in Ayurveda.

Diet nourishes body (*Dhatu*s) and mind. Intake of *Brihana Ahara* (Diet which improves *Mamsa Dhātu* & other *Dhatu*s quantitatively & hence strength) as well as its digestion & assimilation is equally important in development of strength. Hence *Aharaparinamakara Bhava*, *Aharavidhivisheshayatana*, *Aharavidhividhana*, regular exercise, daily & seasonal regimen, proper sleep, celibacy & healthy mind are important in development of *Dhatu*s .

*Aharaparinamakara Bhava*⁵- (factors help in digestion)

1. **Ushma**- *Agni* i.e. power to digest food is necessary for proper assimilation of food. Kindled *Agni* is able to digest *Balya*, *Brihana Ahara* which is *Guru*.
2. **Vayu**- *Pranavayu* transports food near to *Aamashaya* for digestion. *Samanvayu* stimulates *Agni* & various secretions for digestion & further separates excreta from useful part of food. *Apanvayu* helps in excretion of excreta. *Apanadushiti* leads to *Agnimandya*.
3. **Kleda**- i.e. Moisture helps in softening & loosening of food & break them in smaller particles to digest easily.
4. **Sneha**- After digestion food is converted into homologous particles to body elements and transported to specific body parts for absorption by *Srotasa*. This transportation made easy by unctuousness.
5. **Kala**- food need some time for digestion depends upon *Agni*.
6. **Samayoga**- All above factors are important for proper digestion & assimilation of food to main-

tain equilibrium of *Dhatu*s i.e. *Samayoga*. It helps in strengthening of *Dhatu*s.

Aharavidhivisheshayatana⁶-

1. **Prakriti**-i.e. Inherent properties of food particles. Heavy food (*Guru*), leads to indigestion. Lighter food (*Laghu*), kindles *Agni* and is digested easily. Strength developed by *Balya*, *Brihana* food. It is *Guru* by *Prakriti*.
2. **Karana**- It means processing of raw food material leads to modification of original properties of food for desired effect.
3. **Samyoga**-It is combination of two or more substances widely used in the preparation of food. It enhances taste of food. Tasty food refreshes mind and gets properly digested.
4. **Rashi**- It indicates quantity of food. It is advised that one should take food according to *Agni*. Inadequate quantity of food leads to *Ama* (undigested food) or vitiation of *Doshas* which leads to lowering of strength.
5. **Desha**-It is related to the habitat. People should change their diet according to habitat. e.g. *Jangal Desha* is dry,hot & *Vatakara*. Hence people should take unctuous food in such habitat to maintain health.
6. **Kala**- It means time. Day, night, seasons are divided into *Doshaja Kala* & advised to take food accordingly. Otherwise equilibrium of body disturbs due to effect of environment. e.g. Power of digestion increases in cold season (*Hemanta Ritu*). Hence intake of *Balya*, *Brihana Ahara* is desirable.
7. **Upayokta**- The individual who practice above 6 to maintain health & strength of his own.
8. **Upayogsanstha**- Dietetics are important for proper digestion & assimilation of food.

Aharavidhividhana⁷- (rules of consuming food)

It is advised to take hot food in adequate quantity, after digestion of previous meals, with normal speed (neither slow nor hurriedly), without a talk or laugh. It should not contain contradictory potencies (*Viruddha Ahara*). Diet should be taken with concentration & stress-free, happy state of mind. **Satmya Ahara**- Individual should accept *Ahara*, *Vihara*,

Aushadha which is suitable for his *Prakriti*. *Asatmyasevana* leads to vitiation of *Doshas*.

Role of Vihara-It includes *Abhyanga*, *Snana*, *Vyayam*, *Nidra*, *Brahmacharya*.

1. **Abhyanga**⁸ (application of Taila on body regularly)- Regular oil massage makes physic smooth, sturdy, strong and charming.
2. **Snana**⁹ (regular bathing)- Bathing is purifying, stimulant and gives longevity. It removes fatigue, lethargy, sweating, and dirt. It enhances *Ojas* & thus improves physical & mental strength.
3. **Vyayam**¹⁰ (regular exercise)- Physical exercise brings lightness, ability to work, stability, strength, resistance to discomfort & alleviation of *Doshas* (mainly *Kapha*).

It kindles digestive fire i e. *Agni*.

4. **Nidra**¹¹ (proper sleep)- *Swabhjaviki Nidra* i.e. natural sleep gives good health. It regains strength of body, mind and sense organs which are tired due to daily work. Regular and proper sleep helps in maintaining equilibrium of body.
5. **Brahmacharya**¹² (Celibacy)- Ayurveda has included celibacy in the life supporting things. It gives importance to celibacy (*Vaivahika / Naishthika Brahmacharya*,). It has advised controlled sex according to season. *Shukra Dhatu* is outcome of excellence of food. Its diminution leads to many diseases and even death. e.g. excessive loss of *Shukra Dhatu* develops *Pratiloma Kshaya* (deterioration of strength of *Dhatu*s from *Shukra to Rasa*) and weakens the body.

Role of Satva- Healthy mind offers physical & mental health.

‘To think’ is the main function of mind. Excessive thinking, wrong or extremely less thinking becomes causative factor of certain diseases. e.g. Excessive thinking i.e. *Atichinatana*¹³ affects *Rasa Dhatu* and ultimately production of next *Dhatu*s & thus strength.

Role of Medicine- Only ideal diet and regimen are not sufficient to strengthen the body. *Asatmyasevana*¹⁴ (consuming *Ahara* & *vihara* which are not suitable to body and mind), *Prajnyaparadha*¹⁴ (wrong perception, decision and memory) and *Kalaviparyaya*¹⁴ (regimen against *Kala*) are affect strength.

Daily wear & tear of *Dhatu*s leads to debility. Thus some daily medicine needs to avoid deterioration of strength. Hence Ayurveda has advised regular intake of *Rasayana*¹⁵ (rejuvenators) to maintain physical and mental strength by production of excellent *Dhatu*s. Physical strength depends mainly on *Rakta*, *Mamsa* & *Asthi Dhatu*. Ayurveda has described various medicines to improve strength of particular *Dhatu*. These all factors contribute for higher strength.

Benefits of Good strength- It offers constancy of *Mamsa Dhatu* (musculature) and *Meda dhatu* (corpulence). The individual becomes competent for daily work & activities require higher strength. It also offers excellence in complexion, voice & excellent potentiality of sense organs & all body parts.

According to modern science, strength is the maximum force developed during contraction¹⁶.

It’s of two types –

1. Contractile strength – strength during actual contraction.
e.g. while jumping, a person takes off his body from the ground.
- 2, Holding strength – It’s the force while stretching.
e.g. a person landing on the floor after jumping.

DISCUSSION

Inherent strength can be improved by following proper diet, regimen & medicine by mother during pregnancy. It has direct effect on production of body elements of the foetus.

Kalaprabhava (influence of *Kala* i.e. time) is unavoidable but can control by following *Ritucharya* (seasonal regimen). Modern amenities like Airconditioning in very hot or cold season helps to avoid lowering of strength at some extent.

Daily wear & tear of *Dhatu*s affect the strength. Hence *Rasayana* / rejuvenators need to keep *Dhatu-bala* intact.

Mental strength is assessed by a person’s reaction in pain. It may be physical or mental. One can achieve high immunity and tolerance by sound mental health. *Prasanna Mana* i.e. happy & balanced mind is one of the signs of *Swastha* (healthy individual).

Regular exercise & *Snigdha Ahara* is important to achieve higher strength. Regular exercise offers *Laghutva* (lightness) *Sthiratva* (steadiness), *Dridhatva* (firmness) of *Dhatu*s and ability to encounter physical & mental pain. *Siddhasneha* i.e. *Ghrita* processed by *Balya*, *Brihana* medicines recovers daily wear & tear of *Dhatu*s & improves strength.

Rasadhatudushti leads to hamper development of further *Dhatu*s. Weakening of *Dhatu*s leads to deterioration of strength.

Sportsmans and athletes generally follow vigorous exercise to develop physic. Excessive exercise without proper diet, depressed mind may affect their strength. Hence their strength should be measured regularly.

Literary study come out with *Balarhasakara Bhava* i.e. factors responsible for deterioration of strength. These are - *Birth* in *Adanakala* (seasons of low strength i.e. *Shishira*, *Vasanta* & *Grishma*), abnormality in gametes and uterus, Abnormality in *Agni*, Adjustment disorder with the environment, *Alpasatva* (lower mental strength), Arrest of normal growth, old age, Lack of exercise, imbalanced state of mind. Presence of these factors influence strength of the individual.

According to modern theory, strength is depends upon total area of muscles, age, gender, diet, regular exercise and medicines. Regular exercise improve muscles and neurological strength which analyses the weak or strong signal and tells muscle to contract¹⁷.

Strength can be developed by administration of hormones like androgens¹⁸.

Laghutva, *Sthiratva*, and *Dridhatva* the ability to face physical and mental pain. *Siddhasneha*, i.e. *Ghrita*, processed by *Balya* and *Brahmana* medicines, recovers the daily wear and tear of *Dhatu*s and improves strength.

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According to modern theory, strength depends upon the total area of muscles, age, gender, diet, regular exercise, and medicines. Regular exercise improves muscles and neurological strength, which analyses the weak or strong signal and tells the muscle to contract¹⁷.

Strength can be developed by administration of hormones like androgens¹⁸.

CONCLUSION

1. *Sahaja Bala* of the fetus can be improved by proper administration of *Garbhini Paricharya* (regimen followed by mother during pregnancy) described in Ayurveda.
2. Influence of *Kala* on the physical strength can be decreased up to a certain extent with the help of modern amenities. Strength is maintained by proper administration of daily & seasonal regimen with *Rasayana* medicines.
3. *Yuktikrita Bala* i.e. acquired physical strength develops by proper diet & following dietetics, daily & seasonal regimen, healthy & happy mind. Appropriate Diet, mental well-being & selective medicines to develop *Dhatu*s & *Ojas* properly, leads to improvement in strength.
4. Higher strength is achieved by *Abhyasa* -i.e. consistency- in regular exercise, diet & administration of *Siddha Sneha* with *Balya*, *Brihana* & *Vrishya Aushadha*
5. Strength develops only when *Viruddha-Bhava* (opposite factors of development of strength i.e. *Balarhasakara Bhava*) are absent.
6. The improvement in strength should be measured objectively by some instrument like Grip-dynamometer to check effect of diet, regimen &

medicine regularly. This evident data will help to maintain the strength of the patient.

7. Strength can be developed by skilful training to improve neurological strength and intake of some hormones like androgens.

REFERENCES

1. R K Dash, Bhagwan Dash, Charak Samhita Sutra Sthan, Part-I, Ch./Su./11, Shloka no.136, Chaukhamba Sanskrit Sansthan, , Varanasi , Pg. no. 180
2. Pt. Kashinath Shastri, Charak Samhita, Sutra Sthan, Part-I , Ch./Su./11, Shloka no.36 , Chaukhamba Sanskrit Sansthan, Varanasi , Pg. no. 160
3. Pt. Kashinath Shastri, Charak Samhita, Sharira Sthan, Part-I, Ch./Sha./6, Shloka no.13, Chaukhamba Sanskrit Sansthan, Varanasi, Pg. no. 794
4. Pt. Hemaraj Sarma, Kashyap Samhita, Khilsthan , Ka /Khi./ 4, Shloka no.6, Chaukhamba Sanskrit Sansthan, Varanasi, Pg no. 249
5. Pt. Kashinath Shastri, Charak Samhita, Sharira Sthan, Part-I, Chaukhamba Sanskrit Sansthan, Varanasi, Ch./Sha./6, Shloka no.14, Pg. no. 794
6. Pt. Kashinath Shastri, Charak Samhita, Vimana Sthan, Part-I, Chaukhamba Sanskrit Sansthan, Varanasi, Ch./Vi./1, Shloka no.21, Pg. no. 555
7. Pt. Kashinath Shastri, Charak Samhita, Vimana Sthan, Part-I, Chaukhamba Sanskrit Sansthan, Varanasi, Ch./Vi./1, Shloka no.24, Pg. no. 558
8. Prof. Jyotir Mitra, Ashtangsamgraha, Part-I, Sutra Sthan, Chaukhamba Sanskrit Series Office, Varanasi, AS./Su./3, Shloka no.28, Pg. no. 20
9. Prof. Jyotir Mitra, Ashtangsamgraha, Part-I, Sutra Sthan, Chaukhamba Sanskrit Series Office, Varanasi, AS./Su./3, Shloka no.40, Pg. no. 21
10. Jadavaji Trikamaji Acharya, Sushruta Samhita, Part-I, Chikitsa Sthan, Chaukhamba Surabharati Prakashan, Varanasi, Su./Chi./24, Shloka no.38-39, Pg. no. 480
11. Pt. Kashinath Shastri, Charak Samhita, Sutra Sthan, Part-I, Chaukhamba Sanskrit Sansthan, Varanasi, Ch./Su./21, Shloka no.36, Pg. no. 283
12. Pt. Kashinath Shastri, Charak Samhita, Sutra Sthan, Part-I, Chaukhamba Sanskrit Sansthan, Ch./Su./11, Shloka no.35, Pg. no. 160
13. Pt. Kashinath Shastri, Charak Samhita, Vimana Sthan, Part-I, Chaukhamba Sanskrit Sansthan, Ch./Vi./5, Shloka no.13, Pg. no. 595
14. Pt. Kashinath Shastri, Charak Samhita, Chikitsa Sthan, Part-II, Chaukhamba Sanskrit Sansthan, Varanasi, Ch./Chi./11, Shloka no.37, Pg. no. 161
15. Pt. Kashinath Shastri, Charak Samhita, Chikitsa Sthan, Part-II, Chaukhamba Sanskrit Sansthan, Varanasi, Ch./Chi./1, Shloka no.7, Pg. no. 3
16. K Sembulingam, Essentials of Medical Physiology, Jaypee Brothers Medical Publishers, Edition III, Chapter 35, Strength of Muscle, Pg no. 159
17. <https://www.sciencelearn.org.nz/resources/1916-muscle-performance>
18. K Sembulingam, Essentials of Medical Physiology, Jaypee Brothers Medical Publishers, Edition III, Chapter 35, Strength of Muscle, 2004, Pg no. 159
19. Essentials of Medical Physiology- K Sembulingam, Jaypee Brothers Medical Publishers, Edition III, 2004, Chapter 35, strength of Muscle, Page no. 159
20. <https://pubmed.ncbi.nlm.nih.gov/1450886>

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