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Review Article

## Majoon Halaila: A Potential Compound Formulation to Counter Premature Ageing-A Review

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### Abstract

*Majoon Halaila* is polypharmaceutical preparation of Unani System of Medicine given particularly in old age to counter the effects of ageing such as greying of hair, decreased body strength, decreased memory power, weakness of heart etc. It is an electuary which is prepared especially for the people engaged in mental work. It is a compound of *Halailajat* with other ingredients prepared by the process of *Ajin* (mixing), in a semisolid form hence, renamed as *Majoon Halaila*. This compound formulation contains 10 ingredients that possess cardiac tonic, exhilarant, memory enhancer, brain tonic activities. It is being particularly used in age related dementia as well as to counter the effects of ageing in Unani system of Medicine.

**Keywords:** *Majoon Halaila*, Brain tonic, Memory enhancer, Anti-ageing, Unani Medicine

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### Introduction:

Unani System of medicine is one of the oldest systems of medicine that prevails till date with its efficient plant, animal and mineral resources derived drugs. Over 2500 years ago the father of medicine, Hippocrates was practising it, however his medicine included a great touch of ancient Egyptian medicine as well as important components of the ancient Mesopotamian traditions. The methods of treatment according to Unani System of Medicine is divided into four different parts namely *Ilaj Bil Ghiza* (dietotherapy), *Ilaj Bit Tadbeer* (regimenal therapy), *Ilaj Bid Dawa* (pharmacotherapy) and *Ilaj Bil Yad* (surgery). Considering pharmacotherapy, both single and compound drugs are being prescribed. Among the compound drugs *Majoon Halaila* is being prescribed from centuries with great reputation. It is an electuary belonging to the class of polypharmaceutical preparations. *Majoon Halaila* is given particularly in old age to counter the effects of ageing. This electuary which is prepared especially for the people engaged in mental work and that too processed in a semisolid form hence, renamed as *Majoon Halaila*. According to different Unani *Qarabadeen* (pharmacopoeias) this compound preparation is used as stomach tonic, liver tonic, heart tonic and nervine tonics, appetizer, digestive and stomachic<sup>1</sup>. In old

age it is being given as a general tonic, in polyarthralgia and to improve age related dementia.

### Method of Preparation:

For making *Majoon* or any of its allied preparations, *Qiwam* (base) of different consistencies (tar) is generally made. It depends on the nature of ingredients to be used. The *Qiwam* is generally made by adding Aab (water), Araq (distillate) or Aab-e-amar (fruit juices), etc in any of the bases of purified honey, sugar, candy or jiggery etc and boiled over a low fire till it acquires a required consistency. The bases are generally purified by adding Aab-e-lemu (lemon juice), Satt-e-lemu (lemon extract), or Shubb-e-yamani (Alum) before making *Qiwam*. Afterwards the powdered ingredients are mixed in *qiwam* to prepare *Majoon*. *Qiwam* for *majoon* is of two tar (consistency). *Majoon-e-halaila* is made on the same principle while using water with sugar or honey as a base and boiled over low fire till *Qiwam* (consistency) of two tar is achieved<sup>2</sup>.

### Ingredients of Majoon Halaila

Ingredients of *Majoon Halaila* are slightly varied in different *Qarabadeen*. In this review *Majoon Halaila* was prepared according to the formula given in *Qarabadeen Azam*<sup>3</sup>. The ingredients of *Majoon Halaila* are given in the Table 1.

**Table 1:** Showing ingredients with their botanical names and quantity

S.N	Name of drug	Botanical name	Quantity
1	Halaila Siyah	<i>Terminalia chebula</i>	2 dirham (7gm)
2	Balaila	<i>Terminalia belerica</i>	5 dirham (17.5gm)
3	Kundur	( <i>Boswellia serrata</i> )	5 dirham (17.5gm)
4	Tabasheer safaid	<i>Bambusa arundinacea</i>	5 dirham (17.5gm)
5	Sandal safaid	<i>Santalum album</i>	3 dirham (10.5gm)
6	Filfil siyah	<i>Piper nigrum</i>	2.5 dirham (8.75gm)
7	Zanjabeel	<i>Zingiber officinale</i>	1.5 dirham (5.25gm)
8	GulSurkh	<i>Rosa damascene</i>	1.5 dirham (5.25gm)
9	Waj	<i>Acorus calamus</i>	1.5 dirham (5.25gm)
10	Qand safed	Sugar	three times of total weight of all drugs

**Dosage and Administration:** 10 gm *Majoon Halaila* should be taken orally at bed time for two months.

### Actions and Uses

*Majoon Halaila* is well known compound formulation given in old age. *Majoon Halaila* is reported to be cardiac tonic, Table 2: Showing drug, their parts used, functions/uses and scientific studies.

exhilarant<sup>2,4</sup> stomachic<sup>1,2</sup> and cephalic tonic, memory enhancer<sup>1,2,4</sup> laxative, blood purifier, deobstruent, digestive, resolvent<sup>1,2,4</sup> and antiaging activities<sup>1,3</sup>. Unani physicians recommended it to prevent early ageing<sup>2,5,6</sup>, and to delay ageing.<sup>7,8,9,10</sup> Due to its anti-ageing activity, it is recommended for the promotion of health in elderly.

Drug with Botanical name	Parts used	Temperament	Functions/ Uses	Scientific studies
<i>Terminalia chebula</i>	fruit	Cold 1° Dry 2°	Memory enhancer, gastric tonic, exhilarant, cardiac tonic, eye tonic. It is used in the treatment of Dementia, Palpitation, joint pain, Anorexia, Hepatopathy, Splenopathy, General debility. It is also used to evacuate atrabilious humour.	Hypoglycaemic effect and hypolipidemic effect <sup>11</sup> Anti-oxidant effect <sup>12</sup> Anti arthritic activity <sup>13,14</sup> Neuroprotective effect <sup>15</sup> Antigastritis effect <sup>16</sup> Hypourecaemic effect <sup>17</sup> improving gastrointestinal motility <sup>18</sup> Cardiotonic activity <sup>19,20</sup> Hepatoprotective effect <sup>21</sup>
<i>Terminalia belerica</i>	Fruit <sup>22,23</sup> bark <sup>22,23</sup> seed <sup>23</sup> stem <sup>22</sup>	Cold 1° Dry 2°	Stomach tonic, Eye tonic, Brain tonic, Astringent, laxative, Demulcent, Memory tonic, Appetizer, Unripe fruit is purgative, while ripe fruit is astringent.  It is beneficial in atony of stomach, Dyspepsia, weakness of stomach and intestines	Antidiabetic and antioxidant activity <sup>24</sup> Antihypertensive Effect: <sup>25</sup> Anti-Spasmodic and Bronchodilatory Properties: <sup>26</sup>  Hepatoprotective activity <sup>27</sup> Anti-ulcer activity <sup>28</sup>  Antithrombotic and Thrombolytic activity <sup>29</sup>
<i>Boswellia serrata</i> <sup>30, 81</sup>	essential oil <sup>30</sup> gum <sup>31</sup> bark <sup>32</sup> gum-resin <sup>32</sup>	Hot 2° Wet 2°	Eliminates morbid material from vital pneuma and psychic pneuma, Cardiac tonic, Memory tonic, Carminative, Expectorant, Mild astringent, Digestive, Strengthens gum, resolvent, Atony of stomach,	Hepatoprotective effect in diabetic patients <sup>33</sup> Anti inflammatory effect <sup>34</sup> Neuroprotective and antioxidant activity <sup>35</sup>

			Palpitation, amnesia, Urinary incontinence, Cataract, Arthritis. In healthy people it is used for providing energy and strength.	Anti osteoarthritic activity <sup>36</sup> Anti-convulsant Activity <sup>37</sup> Hypolipidemic Activity. <sup>38,39</sup> Hepatoprotective Activity: <sup>40</sup> Antigastritis activity <sup>41</sup> Hypoglycemic Activity. <sup>42</sup> Anti-Asthmatic Activity: <sup>43</sup>
Ba mbusa arundinacea <sup>30,32</sup>	silicicious secretions from interior stalks or stems of female plant <sup>30</sup> .shoots, leaves, seeds, roots <sup>30</sup> articulations <sup>30</sup>	Cold 2° Dry 3° <sup>44</sup>	Astringent, Cardiotonic, Tonic for liver, strengthens teeth, Exhilarant, atony of stomach,	Antihyperlipidemic activity <sup>45</sup> Anti-hypertriglyceridemic and anti-hyperglycemic effect: <sup>46</sup> Silicon and mental health <sup>47</sup> Anti-oxidant activity: <sup>48</sup>
Santalum album <sup>30</sup>	Wood, volatile oil	Cold 3° Dry 2°	Cardiotonic exhilarant Sedative, brain tonic, stomachic, intestinal tonic, memory enhancer, Strengthens gums, Appetizer, weakness of stomach, weakness of heart, Palpitation, weakness of brain, Gastritis, Hepatitis, Urinary diseases, Burning micturition	antipsychotic agent. <sup>49</sup> Antioxidant efficacy <sup>49</sup> Antiinflammatory activity <sup>50</sup> Antihyperglycemic and antihyperlipidemic effect <sup>51</sup> Gastroprotective effect <sup>52</sup> Hepatoprotective effect <sup>53</sup> Cardioprotective activity <sup>54</sup>
Cichorium intybus <sup>30</sup>	whole plant <sup>22</sup> Seeds· roots· flowers <sup>30</sup> fruit <sup>55</sup>	Cold 1° Dry 1°. <sup>56</sup>	Cardiotonic, Liver tonic, Stomachic, deobstruent, clears vitiated humours from stomach, Diuretic, Weakness of spleen, liver disorders, ascitis/dropsy, arthralgia, Gout	Antimicrobial and antioxidant activity <sup>57</sup> Hepatoprotective activity; <sup>58</sup> Nephro protective effect: <sup>59</sup> Anti diabetic activity <sup>60</sup> Hypolipidemic activity. <sup>61</sup> Antioxidant effect <sup>62</sup>
Piper nigrum <sup>30</sup>	Fruits <sup>63,64</sup> oleo-resin <sup>63</sup>	Hot 4° Dry 4°	resolvent, carminative, memory tonic, liver tonic, stomachic, appetizer, digestive, expectorant, aphrodisiac, Deobstruent, nervine tonic  Weakness of nerves, Diseases of brain due to dominance of phlegm and atrabillious humour	Antidepressant activity of black pepper <sup>65</sup> Digestive activity of black pepper <sup>66</sup> Antioxidant activity of black pepper <sup>67</sup> Anti-inflammatory activity of black pepper: <sup>68</sup> Cardioprotective effect <sup>69</sup> Hepatoprotective activity of black pepper: <sup>70</sup> Neuroprotective activity <sup>71</sup>
Zingiber officinale <sup>30</sup>	Rhizome <sup>30</sup>	Dry ginger; Hot 3° Dry 2°  Fresh ginger; Hot 3° Dry 1°	digestive, laxative, Stomach tonic, carminative, Memory tonic, cholagogue & melanagogue,  It is used in old age and in condition of dominance of phlegm in the body. Dyspepsia, Nervine Disorders due to cold, Urinary Incontinence, Paralysis, Facial Palsy, numbness, catalepsy, spasm, Sciatica, Gout	Analgesic, Antiinflammatory and Hypoglycaemic effects <sup>72</sup> Anti-atherosclerotic activity. <sup>73</sup> Anticholesterolemic activity <sup>73</sup> Anti osteoarthritic activity <sup>75</sup> Cholagogic effect <sup>76</sup> Choleretic activity <sup>76</sup> CNS stimulating activity. <sup>77</sup> Digestive effects <sup>78</sup>

				Hypotensive activity <sup>79</sup> Thromboxane A2 inhibition <sup>80</sup> Hepatoprotective effect. <sup>81</sup> Antioxidant effect <sup>81,82</sup> Cardiotonic activity <sup>83</sup> Cardiovascular effect <sup>84</sup>
Rosa damascena <sup>30</sup>	flower petals flower buds, stamens volatile oil, essential oil <sup>30</sup> anther <sup>85</sup>	Cold 1° Dry 2° <sup>85</sup> moderate <sup>86</sup> murakkabul quwa <sup>87</sup>	Exhilarant and tonic to principal organs, stomach tonic, intestinal tonic, resolvent, sedative, deobstruent, strengthens teeth and gums, laxative, carminative	Anti-aging effects <sup>88</sup> Laxative effect <sup>89</sup> Effect on cardiovascular system <sup>90</sup> Antidiabetic activity <sup>91</sup> Anti hyperlipidemic effects <sup>91</sup>
Acorus Calamus <sup>30</sup>	Dried rhizome <sup>64</sup>	Hot 3° Dry 2° <sup>30,64</sup>	Nervine tonic, clears vitiated humour from brain, (brain tonic, clears vitiated humour from stomach, aphrodisiac, Appetizer, Memory tonic, digestive, clears vitiated humour  diseases of nervous system, diseases of spleen, weakness of digestive system, gout, urinary incontinence, cataract, amnesia, numbness, all illnesses due to cold. Continuous use of it provides <i>hararat</i> in nerves of people of colder temperament. <sup>64</sup> It is also used in numbness, atony, insanity, epilepsy, paralysis. <sup>92</sup>	Anti-diabetic Activity <sup>93</sup> Insulin Sensitizing Activity: <sup>94</sup> Antidepressant Activity: <sup>95</sup> Antioxidant Activity: <sup>96</sup> Antihepatotoxic Activities <sup>97</sup> Antihypertensive Effect: <sup>98</sup> Anti-ischemic Heart Disease Activity: <sup>99</sup> Bronchodilatory Activity: <sup>100</sup> Nephro protective effect <sup>101</sup>

## Discussion:

In classical Unani literature *Majoon e halaila* described as stomachic<sup>1,2</sup>, hepatoprotective, gastroprotective, appetite stimulant, digestive, cephalotonic<sup>1,2</sup>, cardiotonic<sup>1,2</sup>, laxative<sup>1,2</sup>, anti ageing. <sup>8,9,10</sup> It contains 10 ingredients. Their actions reported as *kundur*, *filfil siyah*, *Zanjabeel* and *waj* stimulate innate heat<sup>64</sup> which is essential for *Quwa* to perform *afa'al* (functions). *Halaila*, *balaila*, *sandal*, *gule surkh* and *waj* by virtue of their *mulattif* property<sup>31</sup> liquifies the *ghaleez madda* by their moderate heat. *Tukhme kasni*, *filfil siyah*, *zanjabeel*, and *gule surkh* by their *mufatteh sudud*<sup>56</sup> action break the *akhlata luzuja* in small pieces which can be evacuated from the body. *Tukhme kasni* and *filfil siyah* due to their *mudire bol*<sup>30,56</sup> property and *halaila*, *balaila*, *zanjabeel* and *gule surkh* by their laxative action<sup>30</sup> evacuate phlegm and atrabillious humour through bowel and bladder. *Halaila*, *balaila*, *sandal*, *filfil siyah*, *zanjabeel* and *waj* by their *mushtahi* property<sup>56</sup> increases appetite. *Halaila*, *kundur*, *tabasheer*, *sandal*, *tukhme kasni*, *filfil siyah*, *zanjabeel*, *gule surkh*, and *waj* due to their *muqawwie me'da*<sup>56,64</sup> *muqawwie jigar*<sup>32</sup> and digestive action<sup>56</sup> strengthen and improve the *Quwwate Tabiya*, thereby provide the substitute of *tahleel*. *Halaila*, *kundur*, *tabasheer*, *sandal*, *tukhme kasni* and *gule surkh* by their *mufarraha wa muqawwie qalb*<sup>32</sup> action provide strength to the *quwwate haiwania*. *Halaila*, *balaila*, *kundur*, *sandal*, *filfil siyah*, *zanjabeel* and *waj* by their *muqawwie dimagh*<sup>30</sup> property and *muqawwie hafiza*<sup>64</sup> property strengthen *quwwate nafsania*. From the above discussion we can conclude that *Majoon halaila* stimulate innate heat, evacuate *fazil* and superfluous matter, strengthen *quwwate tabiya*, *haiwania* and *nafsania* thereby

regulate/improve the functions of the body thus increase life expectancy and improve quality of life.

*Majoon Halaila* appeared to be efficacious in the geriatric problems. These functions have been proved by scientific studies. However clinical trials or scientific studies are lacking on *Majoon Halaila* as a compound drug. In a clinical trial conducted in National Institute of Unani Medicine Hospital, Bangalore, 40 eligible subjects were selected and randomly assigned into two groups, 30 in test group and 10 in control group. Test group was administered with 10 gm of *Majoon Halaila* orally at bedtime for two months while control group was given placebo for the same period of time as that of test drug. Response was measured by the assessment of Appetite score, Weight, Grip strength score, Physical activity score, 6-CIT score on every 15<sup>th</sup> day and complete haemogram, lipid profile, AIP, LVEF pre and post treatment. Strongly Significant increase (p<0.001) was observed in Appetite score, Weight, Grip strength score, Physical activity score, Serum HDL, LVEF and suggestive significant increase in Haemoglobin (p<0.018), strongly significant decrease (p<0.001) was observed in Serum cholesterol, Serum triglycerides, Serum LDL, AIP, ESR, and in 6-CIT Score in test group with respect to control group. No adverse effects or toxicity has been reported during or after the trial

## Conclusion:

It can be said that *Majoon Halaila* can have a major impact on the patient and family's well being and on the cost of long term care. . Therefore it appears to hold promise in promoting the



general health and thereby reducing the morbidity and mortality in elderly, thus increase the life expectancy and improve their quality of life. Thus we can conclude that

However more scientific studies and clinical trials are needed on this compound formulation to ensure its scientific validation for clinical use in patients in general and in elderly in particular.

## Conflicts of Interest

The authors declare no conflicts of interest.

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