



## Avicenna's Contribution to Use Meats in Cardiovascular Diseases

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### DEAR EDITOR,

Lifestyle modification is one of the most important factors to prevent cardiovascular diseases and also can help to ease the heart related complications [1]. Diet is as the main subjects among various lifestyle modification factors [2]. Meats are as high consumed foods in most of people's daily dietary regimen.

About 1000 years ago, Ibn Sina (Avicenna; 980-1025 AD), a Persian physician had a deep contribution to the role of nutrition including different types of meats in cardiovascular patients [3]. He was one of the most outstanding scientists in the medieval age. His great medical encyclopedia, Canon of Medicine was toughed until the 17<sup>th</sup> century in western universities [4]. He had a significant contribution to cardiovascular issues and wrote two important treaties on cardiology namely *Kitab al-Adviyat ul-Qalbiye* (Book of Medication for Cardiovascular Diseases) and *Resalat-e-Ragshenasi* (Treatise on Pulsology) [5].

Avicenna believed "drinks and foods" is one of the six important principals (*setteh zarooryeh* in Persian Language) that have an

importance role to keep health [3]. He gave a certain value for meats in heart complications. He suggests meat gravy (*Ma' al Lahm* in Arabic language) in the conditions of long-time malnutrition that causes to heart weakness. Avicenna believed to cold, hot, dry, and moist temperaments. He prescribed red meats for the patients with abnormal cold temperaments in their heart (symptoms: slow pulses, shallow breathing, total body weakness, anxiety and pallid skin) as a heart tonic. He also suggests various kinds of bird's meats for these patients. He also prescribed young lamb meat associated with vegetables and spices for the patients with abnormal dry temperament in the heart. In contrast, Avicenna believed high-fat meats can harmful for the heart and vessels. Furthermore, he prohibited using meats in obstruction conditions (he called as *Soddeh*) [6]. It can be equal with atherosclerosis in the vessels and also stroke conditions [5], [7].

Avicenna interests to bird's meats for palpitation (*Khafaghan sard*) complications caused due to abnormal cold temperament. Some of his suggestions are shown in table 1.

In general, it is believed that meat has negative results on health because of high-fat content and also promoting cancer, some

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cardiovascular and metabolic diseases, but current studies show its sufficient consumption can play an important role in keeping health, especially in risk groups (elderly, pregnant women, growing children, etc.) [8], [9]. Furthermore, current investigation state that sufficient meat can positive effect on cardiovascular complications, e.g., taurine in animal meats possess antioxidant and anti-inflammatory effects that can lead to cardiovascular disease

prevention, or conjugated linoleic acid in ruminant animals have benefits in cardiovascular disease [9]. As it can be seen, Avicenna believed sufficient consumption of meat is important to keep cardiovascular system health as well as its possible role in the treatment of some cardiovascular diseases. Current investigations support some the positive role of meat in cardiovascular complications and Avicenna's opinions can be considered as potential ideas to further investigations.

**Table 1.** Bird meats suggested by Avicenna for palpitation

Persian name	English name	Scientific name	Part of use	Traditional uses
Joojeh kabk	Partridge chicken	<i>Perdix perdix</i>	Whole parts	Palpitation
Joojeh kabootar	Dove chicken	<i>Clumba livia</i>	Whole parts	Cold palpitation
Joojeh gonjeshk	Sparrow chicken	<i>Passer domesticus</i>	Whole parts	Cold palpitation
Joojeh chakavak	Lark chicken	<i>Galerida cristata</i>	Whole parts	Cold palpitation
Joojeh khelaf (parastoo)	Swallow chicken	<i>Hirundo rustica</i>	Whole parts	Palpitation

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## REFERENCES

- [1] Ingle L, Carroll S, Stamatakis E, Hamer M. Benefit of adding lifestyle-related risk factors for prediction of cardiovascular death among cardiac patients. *International Journal of Cardiology* 2013; 163(2): 196-200.
- [2] Mahan L, Escott-Stump S, Raymond JL. *Krause's food & the nutrition care process*. Philadelphia, PA: Elsevier Health Sciences; 2012.
- [3] Moradi H, Minaii B, Nikbakht Nasrabadi A, Siahpoosh MB. Avicenna viewpoint about health preservation through healthy nutrition principles. *Iran J Public Health* 2013; 42(2): 220-1.
- [4] Karimi A, Zargaran A, Borhani-Haghighi A. Avicenna's description of Willis circle. *Int J Cardiol* 2013; 168(3): 3041.
- [5] Zargaran A, Zarshenas MM, Karimi A, Yarmohammadi H, Borhani-Haghighi A. Management of stroke as described by Ibn Sina (Avicenna) in the Canon of Medicine. *Int J Cardiol* 2013; 169(4): 233-7.
- [6] Avicenna. *Qanoun fi Al-Tibb the Canon of Medicine*. Tehran, Iran: Soroush Publications; 1987. [In Persian].
- [7] Choopani R, Mosaddegh M, Gir AA, Emtiazy M. Avicenna (Ibn Sina) aspect of atherosclerosis. *Int J Cardiol* 2012; 156(3): 330.
- [8] Biesalski HK. Meat as a component of a healthy diet - are there any risks or benefits if meat is avoided in the diet? *Meat Sci* 2005; 70(3): 509-24.
- [9] Pereira PM, Vicente AF. Meat nutritional composition and nutritive role in the human diet. *Meat Sci* 2013; 93(3): 586-92.