7 Things to Know About Bird's Nest

Woven by swiftlets from their saliva, edible Bird’s Nest (or Bird’s Nest) is one of the most popular tonics in Traditional Chinese Medicine (TCM). Did you know these interesting facts and beliefs about Bird’s Nest?

1. Bird’s Nest is best consumed on an empty stomach.

In TCM, Bird’s Nest is classified as a tonic. Ideally, it should be consumed before meals to allow the body to better absorb its nutrients.

2. The colour of red Bird’s Nest does not come from the swiftlet’s blood.

Contrary to popular belief, the colour of red Bird’s Nest is caused by either oxidation or minerals absorbed from the environment.

3. Men may use Bird’s Nest to promote overall immunity.

Bird’s Nest has high glycoprotein content, growth factors and a neutral energetic property, which help boost a weak immune system.

4. Bird’s Nest is traditionally used as a beauty food.

Bird’s Nest is reputed to maintain youthfulness and enhance the complexion.

Modern studies have shown that Bird’s Nest is rich in epidermal growth factor(EGF). This substance is responsible for skin and tissue repair.

5. Bird’s Nest is believed to speed up recovery.

When Bird’s Nest is consumed in moderation, its unique predigested form of proteins and nutrients is said to aid recovery from chronic illnesses.

In particular, Bird’s Nest may help relieve respiratory ailments such as asthma or chronic coughs.

6. Seniors may use Bird’s Nest to maintain and enhance their health.

Bird’s Nest is traditionally used to clear Phlegm, ease chronic dry coughs and relieve fatigue - common complaints as we get older.

Bird’s Nest can also be used to stimulate the appetite, improve digestion and stimulate bowel movement.

7. Bird’s Nest is a good supplement for growing children.

From a biological standpoint, Bird’s Nest contains proteins, amino acids and minerals that are essential for healthy development.

In TCM, regular consumption of Bird’s Nest helps prevent colds and flus. By improving the function of the Lungs and Kidneys, Bird’s Nest helps boost the body’s immune system and increase resistance to external environmental factors.

*Note:* Since Bird’s Nest may cause allergic reactions in certain individuals, do exercise caution when consuming Bird’s Nest for the first time. Sudah sejak berabad-abad lalu sarang burung walet di China dianggap sebagai makanan yang lezat dan banyak memiliki khasiat bagi kesehatan, terutama untuk mencegah penuaan, mengobati berbagai penyakit, dan sebagai afrodisiak/pendongkrak gairah. Menurut konsep makanan China, hal ini disebut sebagai “Ying” atau makanan dingin. Dan konon juga ceritanya, sup sarang burung walet pada awalnya adalah hidangan dikalangan keluarga dinasti, sehingga merupakan makanan yang sangat istimewa dan harganya sangat mahal.

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Sarang burung walet dibuat dari air liur burung walet itu sendiri, dan pada alam liar biasanya dibuat di suatu tempat yang lembab dan gelap seperti goa-goa di tebing-tebing yang sulit dijangkau manusia. Karena demikian, harga sarang burung yang diyakini berkhasiat tinggi ini dijual dengan harga yang sangat tinggi. Namun karena sekarang sudah banyak dikembangkan, harga sarang burung walet kini sudah turun jauh, berkisar antara 2 juta – 5 juta rupiah perkilogram tergantung kualitas. Untuk jenis sarang burung walet merah harganya masih sangat mahal sekitar, yaitu sekitar 100 jutaan rupiah pada tahun 2010, hal ini karena lebih langka dan lebih tinggi kualitasnya.

## Berikut khasiat dan manfaat sarang burung walet untuk menjaga kesehatan dan pengobatan

### Kandungan nutrisi

Sarang burung yang terbuat dari bahan organik dari air liur walet ini sebagian besar terdiri dari protein larut dalam air, dimana merupakan jenis yang mudah diserap oleh tubuh manusia. Total kadar protein sekitar 65%, sementara sisanya adalah air 10%, lemak  23,3%), dan karbohidrat 0,8%. Hal ini juga mengandung mineral, dan yang terbanyak adalah kalsium dan zat besi. Total kandungan asam amino dalam sarang burung walet adalah sekitar 6 persen, yang terdiri dari amida, humin, arginin, sistin, histidin, dan lisin. Kemungkinan asam amino ini berasal dari kandungan makanan tertentu yang dimakan oleh burung walet.

### Kesehatan reproduksi

Secara tradisional, salah satu manfaat sarang burung walet yang paling diakui adalah menyehatkan sistem reproduksi. Dan ternyata, klaim ini juga dikonfirmasi oleh hasil penelitian dari uji laboratorium yang dirilis Chinese University of Hong Kong tahun 2003. Manfaat ini disebabkan karena sarang burung walet mengoptimalkan fungsi tubuh dan hormon dalam tingkat yang yang sehat untuk [sistem reproduksi yang optimal](http://www.carakhasiatmanfaat.com/artikel/cara-meningkatkan-kesuburan-pria.html). Pengujian lebih lanjut masih perlu dilakukan untuk mendukung atau membantah hasil studi ini.

### Berkhasiat untuk pengobatan

Secara tradisional, sarang burung walet diyakini memiliki khasiat untuk memperkuat paru-paru, serta telah digunakan untuk menyembuhkan dan memperkuat ketahanan tubuh dari penyakit yang berhubungan dengan darah rendah, suhu tubuh tinggi, dan penyakit lainnya. Mengkonsumsi sarang burung juga dianjurkan untuk membantu pengobatan untuk penyakit degeneratif seperti kanker, juga untuk memulihkan kesehatan setelah sakit atau pasca operasi. Penelitian terbaru yang dilakukan di HongKong menyarankan bahwa sarang walet mungkin berguna dalam pengobatan AIDS. Hal ini juga telah diklaim bahwa sarang burung walet mengandung unsur-unsur yang bisa merangsang pertumbuhan sel, yang terutama bermanfaat bagi orang tua yang baru saja pulih dari penyakit.

### Khasiat Bagi wanita

Sarang burung walet terutama banyak dicari oleh para wanita, karena terdapat unsur yang bisa membuat kulit menjadi halus dan berseri-seri. Juga disebutkan bahwa bagi wanita yang sedang hamil, bahwa  mengkonsumsi sarang burung akan membuat bayi yang dilahirkan nanti memiliki halus dan mulus.

### Mempercepat regenerasi sel

China sudah mengkonsumsi sarang burung selama ratusan tahun, dan sebagian besar orang disana percaya bahwa sarang burung walet terdiri dari beberapa protein dan mineral yang bisa membantu regenerasi dan pertumbuhan sel-sel tubuh, meremajakan kulit,  dan meningkatkan sistem kekebalan tubuh. Penelitian juga telah menemukan bahwa sarang burung walet mengandung faktor pertumbuhan epidermal, sehingga para ahli pengobatan di China sering meresepkan sarang burung kepada orang yang mengalami masalah keterlambatan pertumbuhan tanpa sebab yang jelas.

### Meningkatkan metabolisme dan sistem kekebalan tubuh

Penelitian yang dilakukan oleh sebuah laboratorium independen juga telah menunjukkan bahwa sarang burung walet mengandung glikoprotein yang larut dalam air,  yang mempromosikan pembelahan sel yang terdapat dalam sistem kekebalan tubuh. Temuan ini mendukung terhadap kepercayaan yang meyakini bahwa sarang walet bisa mendorong pertumbuhan dan memperbaiki jaringan tubuh. Tidak hanya itu, sarang burung juga memperkuat kerja fungsi tubuh dan memberikan ketahanan terhadap penyakit.

Secara tradisional, sarang walet ini dikatakan paling efektif terutama untuk anak-anak dan orang tua yang suka sakit-sakitan, namun studi Chinese University di HongKong menunjukkan bahwa ada beberapa manfaat yang mungkin bermanfaat untuk segala usia. Selain berkhasiat memperkuat sistem kekebalan tubuh, beberapa hasil temuan juga menunjukkan manfaat positif sarang walet bagi metabolisme tubuh.

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Karena khasiat dan manfaat sarang burung walet bagi kesehatan dipercaya sangat tinggi, maka hal ini membuatnya menjadi sebuah lambang kemewahan dan menjadi langka, yang secara otomatis menjadikan sarang burung walet sebagai komoditas yang mahal. Para konsumen sup sarang burung walet juga banyak yang menyatakan keberhasilan mereka dalam hal penyembuhan penyakit, terutama yang berkaitan dengan sistem pernapasan seperti batuk, asma, atau infeksi tenggorokan – yang membuat permintaan pasarnya semakin tinggi.

- See more at: <http://www.carakhasiatmanfaat.com/artikel/khasiat-manfaat-sarang-burung-walet.html#sthash.jaoGuU5c.dpuf>

# **Apa Saja Kandungan dalam Sarang Burung Walet?**

5 Februari 2011 in [Uncategorized](https://burungwalet.wordpress.com/category/uncategorized/)

Sarang burung walet sudah berabad-abad digunakan dalam Ilmu Pengobatan Tradisional China (Traditional Chinese Medicine) sebagai makanan tambahan yang menyehatkan. Menurut konsep TCM, sarang burung walet digolongkan sebagai makanan ‘dingin’. Jika dikonsumsi dengan bahan makanan lain melalui proses pengolahan tertentu (misalnya ginseng yang bersifat ‘panas’) maka dapat menghasilkan makanan yang mengandung nutrisi tinggi dan dapat bersifat menyembuhkan. Hmmm…..

Penelitian tentang sarang burung walet menemukan beberapa kandungan didalamnya, yaitu: mengandung 50-60% protein, 25% karbohidrat dan 10% air. Kandungan kimia sarang walet dari penelitian di Semarang menunjukkan kandungan kimia organik yang tertinggi terdapat pada protein 50,757 % dan karbohidrat 18,307%.

Sarang walet putih mengandung N-acetylneuraminic acid. Komposisi kimia perbandingan sarang walet putih dan merah untuk lemak (0,14% – 1,28%), abu (2, 1% – 2,1%), karbohidrat (25,62%–27,26%) dan protein (62–63%), serta ditemukan bahwa sarang merah mengandung ovotransferrin protein.

Ovotransferrin adalah glikoprotein dari albumin (putih telur). Transferrins adalah protein pengikat besi. Perbedaan asam amino sarang putih dengan sarang merah menunjukkan sarang merah mempunyai beberapa asam amino yang lebih tinggi dari sarang putih, seperti serine, valine, aspatic, thereorine, isoleusine, leusine.

Pada tahun ’87 telah di ketahui bahwa sarang burung walet mengandung “cell division inducing hormone” dan “epidermal growth factor (EGF)” yang dapat mempengaruhi pertumbuhan dan deferensiasi sel, meliputi jaringan pertumbuhan, regenerasi sel, dan kekebalan tubuh.

Kandungan lain sarang putih adalah natrium (Na) 650 ppm, kalium (K) 110 ppm, fospor (P) 40 ppm, magnesium (Mg) 330 ppm dan besi (Fe) 30 ppm. sedangkan sarang burung walet basah menunjukkan asam amino sebanyak 17 macam dan tertinggi terdapat pada Leusin (5,9%) Aspartat (5,5 %), Glutamat (5,5%) dan Tirosin (5,2).

**Manfaat air liur walet**

Burung walet merupakan burung yang masuk ke dalam keluarga *Apodidae*. Bila kita perhatikan burung walet seolah-olah tidak memiliki kaki, padahal pada kenyataannya burung walet ini memiliki kaki yang pendek. Kebanyakan aktivitasnya tidak berada di tanah, melainkan suka menggantungkan diri dipermukaan yang tegak.

Burung ini terkenal dengan khasiat air liurnya yang digunakan sebagai sarang. Sejak dulu, sarang burung walet diyakini memberikan khasiat yang bagus bagi tubuh manusia. Banyaknya kandungan gizi yang terdapat pada sarang burung walet mungkin menjadi alasan banyak dibudidayakan, selain itu harga satu kilo sarang burungnya relative mahal.

Sarang burung walet memiliki kandungan antioksidan yang tinggi, asam amino, protein, dan 6 hormon yang penting bagi kesehatan manusia, antara lain stradiol dan testoteron. Selain itu, diyakini bahwa sarang burung walet juga memiliki kandungan karbohidrat yang sedikit.

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| [Manfaat Air Liur Walet](http://2.bp.blogspot.com/-io8pHsw-kNk/VENoGosFOZI/AAAAAAAAAYU/wXPPGM8VYOQ/s1600/Manfaat%2BAir%2BLiur%2BWalet.jpg) |
| Khasiat Air Liur Walet |

**Manfaat Air Liur Burung Walet**

Karena walet memiliki air liur yang berada pada sarangnya, banyak orang yang mengambilnya untuk dijadikan sebagai obat herbal alami. Lalu apa sajakah manfaat dair air liur burung walet ini ?

* Meningkatkan produksi sel dalam tubuh .
* Melawan radikal bebas, karena banyaknya asam amino dan antioksidan di dalam sarang burung walet.
* Menjaga sistem kekebalan tubuh supaya terhindar dari berbagai jenis penyakit.
* Menambah nafsu makan
* Memperkuat kerja fungsi paru-paru dan ginjal.
* Meningkatkan kerja jantung
* Bagi penderita hipertensi mengkonsumsi obat dari sarang burung walet sangatlah baik karena dapat menurunkan tekanan dalam darah.
* Membantu pengobatan penderita kanker dan mencegah terjadinya kanker.
* Biasanya sarang burung walet dapat diolah menjadi minuman ataupun dijadikan sup yang kaya gizi. Namun, tidak semua orang bisa menikmati makanan dari sarang burung walet, mengingat harganya yang mahal dan sulitnya untuk mendapatkan sarang burung walet.
* Sarang burung walet juga baik bagi ibu hamil dan pasca melahirkan karena dapat meningkatkan kesehatan dan meningkatkan antibody serta kesehatan ibu juga janin yang dikandung.
* Sarang burung walet banyak mengandung kolagen yang baik untuk kesehatan kulit, mencegah penuaan dini, dan mengencangkan kulit.

**Cara membuat ramuan dari sarang burung walet**

* Cuci bersih satu keping sarang burung walet, rendam ke dalam air dengan suhu normal selama sekitar 2 jam.
* Setelah sarang mengembang, tiriskan.
* Masak air kira-kira 400 ml sampai mendidih
* Tambahkan gula secukupnya, lalu aduk sampai larut.
* Bila air mendidih dan gula telah larut, masukan sarang burung walet.
* Masak selama 3-5 menit dengan api kecil.
* Sup dari sarang burung walet sudah siap dan bisa dinikmati
* Selamat mencobanya di rumah !

Demikianlah pembahasan mengenai ***manfaat air liur burung walet*** beserta tips membuat ramuan dari sarang walet. Semoga berguna !

**Edible bird's nests** are [bird nests](https://en.wikipedia.org/wiki/Bird_nest) created by [swiftlets](https://en.wikipedia.org/wiki/Edible-nest_swiftlet) using solidified [saliva](https://en.wikipedia.org/wiki/Saliva), which are harvested for human consumption. They are particularly prized in Chinese culture due to their rarity, and supposedly high nutritional value and exquisite flavor. Edible bird's nests are among the most expensive animal products consumed by humans[*[citation needed](https://en.wikipedia.org/wiki/Wikipedia:Citation_needed" \o "Wikipedia:Citation needed)*], with an average nest retailing for about $2,500 (US) per kilogramme in Asia[[*citation needed*](https://en.wikipedia.org/wiki/Wikipedia:Citation_needed)]. The type or grading of bird`s nest depends on the type of bird as well as the diet of the bird. It differs in colour from white to dark brown. The Chinese believe that it promotes good health, especially for the skin.[[1]](https://en.wikipedia.org/wiki/Edible_bird%27s_nest#cite_note-investvine-1) The nests have been used in Chinese cooking for over 400 years, most often as bird's nest soup.[[2]](https://en.wikipedia.org/wiki/Edible_bird%27s_nest#cite_note-Hobbs-2)

Etymology[[edit](https://en.wikipedia.org/w/index.php?title=Edible_bird%27s_nest&action=edit&section=1" \o "Edit section: Etymology)]

The Chinese name for edible bird's nest, 燕窝 [yàn wō], translates literally as "swallow's (or swift's) nest", and often serves as a synonym for bird's nest soup. However, 燕窝 [yàn wō] strictly speaking is the uncooked nest.[*[citation needed](https://en.wikipedia.org/wiki/Wikipedia:Citation_needed" \o "Wikipedia:Citation needed)*]

Culinary use[[edit](https://en.wikipedia.org/w/index.php?title=Edible_bird%27s_nest&action=edit&section=2" \o "Edit section: Culinary use)]

[](https://en.wikipedia.org/wiki/File:Bird%27s-nest-soup-Miri-Malaysia.jpg)

A bowl of bird nest soup in [Miri, Malaysia](https://en.wikipedia.org/wiki/Miri,_Malaysia).

The most famous use of edible birds nest is bird's nest soup, a delicacy[[3]](https://en.wikipedia.org/wiki/Edible_bird%27s_nest" \l "cite_note-Marcone-3) in [Chinese cuisine](https://en.wikipedia.org/wiki/Chinese_cuisine). When dissolved in water, the birds' nests have a gelatinous texture used for [soup](https://en.wikipedia.org/wiki/Asian_soup) or sweet soup [tòhng seui]. It is mostly referred to as 燕窝 [yin wò] unless references are made to the savoury or sweet soup in [Chinese cuisine](https://en.wikipedia.org/wiki/Chinese_cuisine). According to the [Qing Dynasty](https://en.wikipedia.org/wiki/Qing_Dynasty)manual of [gastronomy](https://en.wikipedia.org/wiki/Gastronomy), the [Suiyuan shidan](https://en.wikipedia.org/wiki/Suiyuan_shidan), bird nest was a delicate ingredient that must not be flavoured or cooked with anything strong tasting or oily. As well, while it is incredibly precious, it must also be served in relatively large quantities otherwise its texture cannot be fully experienced and enjoyed.[[4]](https://en.wikipedia.org/wiki/Edible_bird%27s_nest#cite_note-4)

In addition to its use in soup, edible birds nest can be used as an ingredient in many other dishes, it can be cooked with rice to produce bird's nest [congee](https://en.wikipedia.org/wiki/Congee) or bird's nest boiled rice, or it can be added to [egg tarts](https://en.wikipedia.org/wiki/Egg_tart) and other desserts. A bird's nest jelly can be made by placing the bird's nest in a ceramic container with minimal water and sugar (or salt) and[double steamed](https://en.wikipedia.org/wiki/Double_steaming). Ready to eat bird's nest jelly is available in jars as a commercial product.

Harvesting[[edit](https://en.wikipedia.org/w/index.php?title=Edible_bird%27s_nest&action=edit&section=3" \o "Edit section: Harvesting)]

The most heavily harvested nests are from the [edible-nest swiftlet](https://en.wikipedia.org/wiki/Edible-nest_swiftlet) or white-nest swiftlet (*Aerodramus fuciphagus*) and the [black-nest swiftlet](https://en.wikipedia.org/wiki/Black-nest_swiftlet) (*Aerodramus maximus*).[[5]](https://en.wikipedia.org/wiki/Edible_bird%27s_nest#cite_note-Gausset-5) The white nests and the red nests are supposedly rich in nutrients, which are traditionally believed to provide health benefits.[[2]](https://en.wikipedia.org/wiki/Edible_bird%27s_nest#cite_note-Hobbs-2)

Most nests are built during the breeding season by the male swiftlet over a period of 35 days. They take the shape of a shallow cup stuck to the cave wall. The nests are composed of interwoven strands of [salivary](https://en.wikipedia.org/wiki/Saliva) cement. Both nests have high levels of calcium, iron, potassium, and magnesium.[[3]](https://en.wikipedia.org/wiki/Edible_bird%27s_nest#cite_note-Marcone-3)

Natural birds' nests on the Thai island, Bird's Nest Island.

Hong Kong and the United States are the largest importers of these nests.[[6]](https://en.wikipedia.org/wiki/Edible_bird%27s_nest#cite_note-Park-6) In Hong Kong, a bowl of bird's nest soup would cost US$30 to US$100.[[2]](https://en.wikipedia.org/wiki/Edible_bird%27s_nest#cite_note-Hobbs-2)[[6]](https://en.wikipedia.org/wiki/Edible_bird%27s_nest#cite_note-Park-6) A kilogram of white nest can cost up to US$2,000, and a kilogram of red nests can cost up to US$10,000. The white nests are commonly treated with a red pigment, but methods have been developed to determine an adulterated nest. Natural red cave nests are often only found in limestone caves in a bird nest concession island in Thailand.[[3]](https://en.wikipedia.org/wiki/Edible_bird%27s_nest#cite_note-Marcone-3) The high cost and demand has attracted counterfeiters, leading to the halt of Malaysian nest exports to China; the Malaysian government has undertaken to employ [RFID](https://en.wikipedia.org/wiki/RFID) technology to thwart counterfeiting by micro-chipping nests with details about harvesting, packaging and transport.[[7]](https://en.wikipedia.org/wiki/Edible_bird%27s_nest#cite_note-7) Industrial quality-control techniques such as [failure mode and effects analysis](https://en.wikipedia.org/wiki/Failure_mode_and_effects_analysis) have been applied to edible bird's nest processing at nesting houses in Sarawak, Malaysia and reported by a research team in by [Universiti Malaysia Sarawak](https://en.wikipedia.org/wiki/Universiti_Malaysia_Sarawak).[[8]](https://en.wikipedia.org/wiki/Edible_bird%27s_nest#cite_note-8)[[9]](https://en.wikipedia.org/wiki/Edible_bird%27s_nest#cite_note-9)[[10]](https://en.wikipedia.org/wiki/Edible_bird%27s_nest#cite_note-10)

The nests were formerly harvested from caves, principally the enormous [limestone](https://en.wikipedia.org/wiki/Limestone) caves at [Gomantong](https://en.wikipedia.org/wiki/Gomantong) and [Niah](https://en.wikipedia.org/wiki/Niah_Caves) in[Borneo](https://en.wikipedia.org/wiki/Borneo). With the escalation in demand these sources have been supplanted since the late 1990s by purpose-built nesting houses, usually [reinforced concrete](https://en.wikipedia.org/wiki/Reinforced_concrete) structures following the design of the Southeast Asian shop-house ("rumah toko"/"ruko").[[11]](https://en.wikipedia.org/wiki/Edible_bird%27s_nest#cite_note-11) These nesting houses are normally found in urban areas near the sea, since the birds have a propensity to flock in such places. This has become an extraordinary industry, mainly based on a series of towns in the Indonesian Province of [North Sumatra](https://en.wikipedia.org/wiki/North_Sumatra), which have been completely transformed by the activity. From there the nests are mostly exported to the markets in Hong Kong, which has become the centre of the world trade, though most of the final consumers are from mainland China. It has been estimated[[*citation needed*](https://en.wikipedia.org/wiki/Wikipedia:Citation_needed)] that the products now account for 0.5% of the Indonesian GDP, equivalent to about a quarter of the country's fishing industry. The entire global industry is an estimated $5 billion.[[12]](https://en.wikipedia.org/wiki/Edible_bird%27s_nest#cite_note-12)

A Bird in the Hand

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| http://www.business-in-asia.com/industries/images/birdnest_banner.jpg  Bird’s nest soup is a delicacy in Chinese cuisine. The Chinese name for bird's nest soup, yàn wō (燕窝), translates literally as "swallow's nest". This soup has been consumed in China for over in excess of 1000 years. Edible bird’s nests are among the most expensive animal products consumed by humans. The material is also used in Traditional Chinese Medicine and Cosmetics.   |  |  | | --- | --- | | [http://www.business-in-asia.com/industries/images/bird_video.jpg](http://www.business-in-asia.com/industries/birdnest.mp4)  *Video above: Hundreds of thousands of swiftlets returning to their nesting house owned by Yen Viet Company - this occurs each evening.* | The nests are made by a relatively small number of species of swift, namely cave swifts, that have a unique chemical texture to the saliva they use to make their nests. It has the reputation of being an aphrodisiac or having traditional health enhancing qualities. Based on recent research, it appears that this claim of health benefits is not a myth but based on real fact. According to a recent medical research reported by Hong Kong Chinese University, the cell division enzyme and hormone of bird’s nest can promote reproduction and regeneration of human cells. It also helps promote one’s immune system and enhances body metabolism. |   **Harvesting**  Swiftlets (collocaliini) are tiny insectivorous birds that are distributed from the Indian Ocean, through Southeast Asia including Thailand, Malaysia, Vietnam, the Philippines and Indonesia and North Australia to the Pacific. The small birds eat insects only and catch these insects on the fly as they fly from nearly first light until nearly dark.  Amongst various species of swiftlets in the genus of Collocalia, only the nests of four species mostly spread throughout Southeast Asian region have commercial value because of human consumption. They are Collocalia fuciphaga, Collocalia germanis, Collocalia maxima and Collocalia unicolor. Collocalia species are relatively small and average 6.5g in weight, and have glossy plumage.   Each of these species produces nests with salivary glue, a cementing substance, although other materials such as vegetation or feathers may also be utilized. It takes the bird about 20-35 days to finish the nest. The nests take the shape of a shallow cup stuck to the cave wall. The nests are composed of interwoven strands of salivary laminae cement. Nests have high levels of calcium, iron, potassium, and magnesium. The edible bird's nests ( 燕窩 in Chinese) made up of pure salivary glue are much more expensive than those incorporating other materials.  These nests with other materials are considered seconds or lesser valued.  According to reports, the most heavily harvested nests are from the Edible-nest Swiftlet or White-nest Swiftlet (Aerodramus fuciphagus) and the Black-nest Swiftlet (Aerodramus maximus). The white nests and the "red blood" nests are supposedly rich in nutrients which are traditionally believed to provide health benefits, such as aiding digestion, raising libido, improving the voice, alleviating asthma, improving focus, and an overall benefit to the immune system.    **Health Benefits of Bird’s Nests**  Being one of the TCMs, edible bird's nest is believed to have health enhancing effects such as anti-aging, growth promoting and immuno-enhancing properties.  However, unlike other traditional medicine materials edible bird's nest is different from most of the TCMs. It is unique in that it is not only a medicine to make people healthy but also a pleasant food to be consumed and enjoyed. Traditionally, it is double boiled with rock sugar to make a delicacy known as "bird's nest soup".  The gelatin drink that is served in small glass bottles also is processed with rock sugar and has a slightly sweet taste.  Although the size of Collocalia bird is small, the market generated by it is quite large and growing at double digit rates. Malaysia is the world's third largest supplier of birds' nests after Thailand and Indonesia, contributing 10 percent of the 210 tonnes, worth up to $4 billion US dollars, consumed annually by top buyers in China and Taiwan.  The size and importance of this market is huge for all of these countries. nationally in Hong Kong, Taiwan, China and elsewhere.   Why is Hong Kong the leading consumer of birds nests?  It may be due in part to the fact that Hong Kong people are increasingly concerned about their health and the status of TCM has risen after a series of government policies on TCM. Moreover, the dual nature of edible bird's nest, which utilizes them both as medicine and/or food, may play a role as food in centrally linking cultural pastime in Hong Kong. In the past, people could only buy dried edible bird's nests and render them in a fairly time consuming process. This has changed and currently a large variety of edible bird's nest related products have emerged in the market. These products are mostly ready to serve products. No cooking process is required. Amongst these new products, most of them are still in the traditional form as bird's nest soup, such as instant bird's nest in different concentrations. Some instant bird's nest may also be supplemented with other TCMs.   **Nutritional Content and Medicinal Use**  Edible bird's nest contains mainly amino acids, carbohydrates and mineral salts. The major ingredients of edible bird's nest are glycoproteins. Amongst the carbohydrates in edible bird's nest, sialic acid (9%) is the major one. It was found that exogenous source of sialic acid may contribute to neurological and intellectual advantages in infants[12]. However, the nutritional and biological mechanisms of sialic acid in human body are still under investigation. The other major carbohydrates include 7.2% galactosamine, 5.3% glucosamine, 16.9% galactose and 0.7% fucose.  Amino acids and mineral salts are also important components in edible bird's nest. Three non-essential amino acids (aspartic acid, glutamic acid, praline) and two essential amino acids (threonine and valine) can be found[11]. They could facilitate normal body functions such as cell repair and promote immunity. Edible bird's nest is rich in mineral salts. It contains high content of sodium and calcium. It is because the source of edible bird's nest is derived from saliva Collocalia inhabiting mainly in limestone caves. In addition, low levels of magnesium, zinc, manganese and iron are also detected in edible bird's nest[8].  In spite of the long history of using edible bird's nest for medicinal purposes, there is not much scientific research related to the therapeutic use of bird’s nest. The earliest recent scientific evidence was given by Ng et al. (1986) in Hong Kong. Edible bird's nest aqueous extract was found in his studies to potentiate mitogenic response of human peripheral blood monocytes to stimulation with proliferative agents, Concanavalin A and Phytohemagglutinin A. The results of this research suggested that edible bird's nest might possess immunoenhancing effect by aiding cell division of immune cells.  One year later, other scientific evidence was published by Kong et al. This study demonstrated an epidermal growth factor (EGF)-like activity in aqueous extract of edible bird's nest that stimulated the DNA synthesis in 3T3 fibroblast in a dose dependent manner in vitro. EGF is a 6,000 Da polypeptide hormone produced by glands of the gastrointestinal tract, namely the salivary and Brunner's glands. It appears to play a crucial role in major normal cellular processes such as proliferation, differentiation and development. It may offer a rationale for the medicinal use of edible bird's nest in ageing resistance.  Since the receptor for EGF is highly expressed in a number of solid tumors, including breast, head-and-neck, non-small-cell lung, renal, ovarian and colon cancer, people are worried about a possibility to induce tumor progression and to resist chemotherapy/radiation treatment in tumor cells; in consequence, suggest that cancer patients should avoid edible bird's nest. In fact, there is no evidence supporting this suggestion. Currently we have evaluated the effects of aqueous extract of edible bird's nest on the viability on two human cancer cell lines, human breast cancer MCF-7 (ATCC HTB-22) and human liver cancer HepG2 (ATCC HB-8065). There was no observable effect on cell viability when comparing with the control group (unpublished data).  In 1994, a research team in China, evaluated the pharmacological effects of edible bird's nest and pearl powder containing formulation. The formulation was demonstrated to have immuno enhancing effects by elevating DNA synthesis of T-lymphacytes and circulating immunoglobulin M content in mice. In addition, the formulation also showed ageing retardation by increasing the level of superoxide dimutase. However, the study did not explore whether the effects came from either edible bird's nest, pearl powder or both.  **Further Studies**  Edible bird's nest has been used for hundreds or more probably thousands of years. Despite this, scientific evidence for its efficacy is still limited. The claimed health benefits such as resisting aging and improving immunity of edible bird's nest is yet to be conclusively proven.   Recently, groups in Hong Kong and more recently in Vietnam, led by Ong Ba Dat Phen, Mephydica and Delphi Health Service are conducting modern biotech and biochemical research on Vietnamese birds nests to better document the health promoting qualities and to better understand the science.  This research is being supported by modern birds nest raising companies like Yen Viet who know that the secrets of birds nest need to be better understood and documented and who are always trying to improve and enhance the consumers experience. |