

Natural Alternative Use Case

Part 1: Kei Cheung

Part 2: Jun Zhao

**Part 1: Possible resources about
alternative medicines
(Ginkgo biloba)**

Ginkgo biloba

- A unique species of a tree with no living relatives
- The extract of its leaves has been used pharmaceutically
 - improvement in blood flow
 - protection against oxidative cell damage from free radicals
 - blockage of many of the effects of platelet-activating factor (platelet aggregation, blood clotting) related to the development of a number of cardiovascular, renal, respiratory and central nervous system disorders
- Undesirable side effects, especially for individuals with blood circulation disorders and those taking anticoagulants such as ibuprofen, aspirin, or warfarin

MedlinePlus

- <http://medlineplus.gov/>
 - It helps answer health questions
 - It brings together authoritative information from NLM, NIH, and other health related organizations
 - It links to PubMed
 - It contains extensive information about drugs, an illustrated medical encyclopedia, interactive patient tutorials and latest health news
 - It also includes information about natural supplements

MedlinePlus: Supplement (Ginkgo)

 **MedlinePlus**
Trusted Health Information for You

A service of the U.S. NATIONAL LIBRARY OF MEDICINE
and the NATIONAL INSTITUTES OF HEALTH

Search MedlinePlus

About MedlinePlus | Site Map | FAQs | Contact Us

Home Health Topics **Drugs & Supplements** Encyclopedia Dictionary News Directories Other Resources **español**

Other herb and supplement names: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Ginkgo (Ginkgo biloba L.)



Contents of this page:

- ◆ [Background](#)
- ◆ [Synonyms](#)
- ◆ [Evidence](#)
- ◆ [Dosing](#)
- ◆ [Safety](#)
- ◆ [Interactions](#)
- ◆ [Methodology](#)
- ◆ [Selected references](#)



Ginkgo

Background [Return to top](#)

Ginkgo biloba has been used medicinally for thousands of years. Today, it is one of the top selling herbs in the United States.

Ginkgo is used for the treatment of numerous conditions, many of which are under scientific investigation. Available evidence demonstrates ginkgo's efficacy in the management of intermittent claudication, Alzheimer's/multi-infarct dementia, and "cerebral insufficiency" (a syndrome thought to be secondary to atherosclerotic disease, characterized by impaired concentration, confusion, decreased physical performance, fatigue, headache, dizziness, depression, and anxiety).

Although not definitive, there is promising early evidence favoring the use of ginkgo for memory enhancement in healthy subjects, altitude (mountain) sickness, symptoms of premenstrual syndrome (PMS), and reduction of chemotherapy-induced end-organ vascular damage.

Although still controversial, a recent large trial has shifted the evidence against the use of ginkgo for tinnitus.

Chinese WikiPedia (Ginkgo)

银杏

维基百科，自由的百科全书

银杏（*Ginkgo biloba*），又名**白果**，是一种子**遗植物**，和它同門的所有其他植物都已灭绝。

目录 [隐藏]
1 历史
2 外形
3 特点和用处
4 银杏之乡
5 参考
6 外部链接

历史

和它相亲的植物在两亿七千万年前就已经生成，属于银杏門。在大约一亿多年前的**侏羅紀**後期，银杏类广泛分布于地球上。而现在的银杏是这类植物中生存至今的唯一成员。因此，有人将银杏称为“活化石”和“**孑遗植物**”。

中国人种银杏历史悠久，有些寺庙里的树已经有1,500年了。因为佛教认为银杏是圣树，所以僧侣们在庙里的栽种，而且养护上千年。欧洲人在1691年第一次见到银杏种在一个日本佛庙花园。因为银杏在儒学和佛教都很有名，日本和朝鲜也有很多人种植银杏。1712年，一个德国医生把它引种到欧洲。虽然银杏到处都有，直到近代才在中国西部两个小地区发现**野生**银杏。

银杏树也很长命。据说有些树已经2,500多年了。树可以长到很高大，**贵州**李家湾有一棵40米高，在**甘肃**还有一棵60米高。**郟城**县新村乡有一棵银杏树，据说有3000年历史，公树，在当地号称为“老神树”。

外形

银杏树为裸子植物中唯一的中型落叶**闊葉乔木**，可以长到20－35米高，有着较为消瘦的**树冠**，枝杈有些不规则。

银杏叶子在种子植物中很特别，擁有一般裸子植物所沒有的闊葉型葉子，叶子是扇形，叶脉和叶子同形。叶子有的长在枝头，左右两边零零散散一边一片，有的长在一团，一个地方很多片。

银杏具有一定观赏价值。因其枝条平直，树冠呈较规整的**圓錐形**，大量种植的银杏林在**视觉效果**上具有整体美感。银杏叶在秋季会变成金黄色，在秋季低角度阳光的照射下比较美观，常被摄影者用作背景。

银杏为**裸子植物**，只有种子的构造，尚未演化出**被子植物**的果实，但银杏种子的种皮发达，看起来与被子植物的果实没有什么不同。银杏种子是1.5–2厘米，包在2–3厘米的棕黄色的种皮裡。银杏的种子稱為白果，有点像杏子，因为含有很多**丁酸**，闻起来象是腐败的**奶油**。也有人对果浆中的成分过敏，发痒长水泡，洗果子的时候需要戴手套。种子剥出烧熟可以吃，是**中国**和**日本**的传统**食物**。

银杏是雌雄异株，但有极少的银杏是雌雄同株。繁殖方式有种子繁殖和扦插繁殖，种子繁殖很容易成活，扦插繁殖可以用银杏树根部的小芽进行。

特点和用处

維基百科的內容只供參考，**並不能視作醫療意見**。任何健康問題應諮詢專業的醫護人員。

银杏树不怕**城市污染**，别的树长不活的地方也能长，因此它的亲戚统统绝种更是奇怪。因它大命，又漂亮，用来作用城市环美很合适。银杏也可以栽成**盆景**作摆设。以种子繁殖银杏需要20–30年才会结果，故称**公孙树**，是说公公种的树，到孙子才能收获。

上百年来，银杏提取物在中医药中有着特殊的地位。在中药有一味药白果，即为银杏的种子。据《**本草纲目**》记载：“白果小苦微甘，性温有小毒，多食令人腹胀”。“熟食温肺、益气、定喘嗽、缩小便，止白浊，生食降痰，消毒杀虫，嚼浆涂鼻面手足，去鼻疽疱黑干黧皴皱及疥癣疔虫阴虱”。直到近代才有西方学者研究银杏的药用价值。

银杏叶子里包含**黄酮类化合物**苷，可以入药。提炼出的产品现常用来防晕，增强记忆力。可是到底有没有这些用途，现在还有争论。

银杏
 <div>银杏葉</div>
保护现状
<div>Extinct Threatened Lower Risk <div> <div><div>EX</div></div> <div><div>EW</div></div> <div><div>CR</div></div> <div><div>EN</div></div> <div><div>VU</div></div> <div><div>cd</div></div> <div><div>nt</div></div> <div><div>lc</div></div> </div></div>
濒危 （IUCN）
科學分類
界： 植物界 Plantae
門： 银杏門 Ginkgophyta
綱： 银杏綱 Ginkgoopsida
目： 银杏目 Ginkgoales
科： 银杏科 Ginkgoaceae
屬： 银杏屬 <i>Ginkgo</i>
種： 银杏 <i>G. biloba</i>
二名法
<i>Ginkgo biloba</i> <div>L.</div>

[编辑]



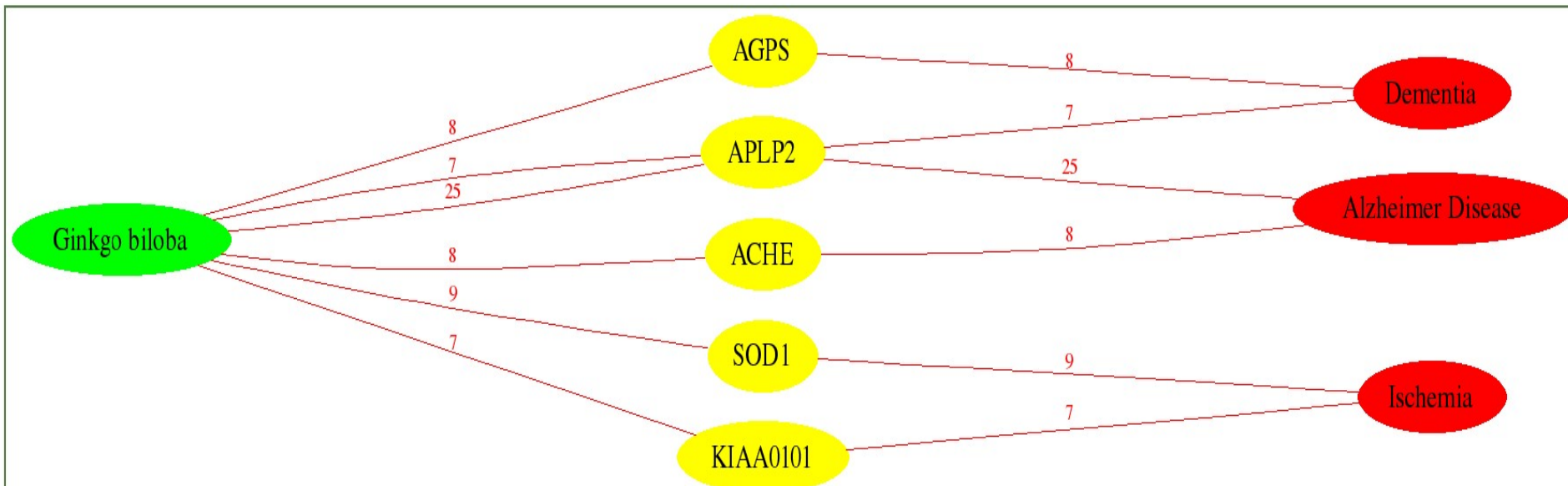
TCMGeneDIT

<http://tcm.lifescience.ntu.edu.tw/>

TCMGeneDIT is a database system providing association information about traditional Chinese medicines (herbs), genes, diseases, TCM effects and TCM ingredients automatically mined from vast amount of biomedical literature.



Confidene: (If the graph doesn't change after submit, please reload your browser.)



ClinicalTrials.gov (Ginkgo)

ClinicalTrials.gov

A service of the U.S. National Institutes of Health

[Home](#) [Search](#)

[List Results](#)

[Refine Search](#)

[Results by Topic](#)

[Results on Map](#)

[Search Details](#)

Found 21 studies with search of: ginkgo

[Hide studies that are not seeking new volunteers.](#)

1 **Recruiting**

[Ginkgo Biloba to Improve Short-Term Memory Losses Associated With Electroconvulsive Therapy \(ECT\)](#)

Condition: Memory, Short-Term

Interventions: Dietary Supplement: ginkgo biloba; Other: matched placebo

2 **Recruiting**

[Efficacy and Safety of Ginkgo Biloba Extract in Mild Cognitive Impairment and Cerebrovascular Insufficiency](#)

Conditions: Mild Cognitive Impairment; Cerebrovascular Insufficiency

Interventions: Drug: Ginkgo biloba standardized extract 24/6; Drug: Ginkgo Biloba standardized extract 24/6; Drug: placebo

3 **Completed**

[Effect of Ginkgo Biloba on Phenytoin Elimination](#)

Condition: Healthy

Intervention: Drug: Ginkgo Biloba

4 **Completed**

[Ginkgo Biloba Extract and the Insulin Resistance Syndrome](#)

Condition: Type 2 Diabetes Mellitus

Intervention: Drug: Ginkgo biloba extract

5 **Completed**

[A Pilot Study of Curcumin and Ginkgo for Treating Alzheimer's Disease](#)

Condition: Alzheimer's Disease

Interventions: Drug: Placebo and ginkgo extract; Drug: Curcumin and ginkgo extract; Drug: Curcumin and ginkgo extract

6 **Completed**

[Ginkgo Biloba: Antidepressant-Induced Sexual Dysfunction](#)

Conditions: Hypoactive Sexual Desire Disorder; Sexual Dysfunctions, Psychological

Interventions: Drug: Ginkgo Biloba; Behavioral: Sex Therapy (genital focus)

Latest News (USA TODAY)

Ginkgo biloba doesn't block Alzheimer's

Updated 6d 22h ago | Comments  32 | Recommend  19

E-mail | Save | Print | Reprints & Permissions |  RSS

By [Mary Brophy Marcus](#), USA TODAY



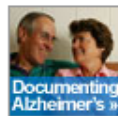
Other ways to share:



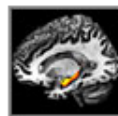
What's this?

■ COPING WITH ALZHEIMER'S

■ **Home base:** The basics and latest news



■ **Graphic:** The science behind the disease



■ **Follow their journey:** Bob Blackwell blogs 'Living with Alzheimer's' | A family confronts diagnosis



■ **Minorities:** An African-American church's fight against a higher rate of incidence



■ **Forum:** Do you puzzle for brain fitness?

■ **Changes:** 'Early onset' cases rising | Patients up 4x by 2050



More 

Hopes have been dashed once and for all that the dietary supplement ginkgo biloba can protect against age-related dementia and the memory-destroying disease Alzheimer's, according to a large government-funded study out today.

In the largest clinical trial ever to evaluate the impact of ginkgo biloba supplements on the development of dementia, the results have come up flat, says study author Steven DeKosky, vice president and dean of the University of Virginia School of Medicine. DeKosky's research appears in this week's *Journal of the American Medical Association*.

IN-DEPTH: [Video and what you need to know about the disease](#)
BETTER LIFE: [News briefs and studies on Alzheimer's](#)
PERSONAL BLOG: [Bob Blackwell is in the early stages](#)

"We're hugely disappointed. It could have saved hundreds of thousands of people from getting the disorder," DeKosky says.

For the study, DeKosky and colleagues tested the effectiveness of 120 milligrams (mg) of ginkgo twice daily vs. a placebo in diminishing dementia and Alzheimer's in more than 3,000 elderly volunteers. The participants were 75 or older and had normal cognitive health or only mild cognitive problems at the study's launch in 2000. They were followed up every six months for six years.

FIND MORE STORIES IN: [Medical Association](#) | [Duke University](#) | [Alzheimer's???](#) | [Nutrition Business Journal](#) | [University of Virginia School of Medicine](#) | [BETTER LIFE News](#) | [Memory Disorders Program](#) | [University of Southern California Keck School of Medicine](#)

■ ON THE WEB

Possible Directions

- Identify conflicting research findings/hypotheses
- Link to resources such as drug databases and TCM
- Semantic Wiki for collective knowledge acquisition and semantic annotation (e.g., Wikipedia/DBPedia)
 - Some information can only be found in the wikipedia articles but not from DBPedia
- Semantic Web applications for integrated queries

Part 2: DBPedia

Retrieve information using DBPedia

- The goal
 - To investigate whether it is possible to retrieve useful information from DBPedia Chinese
 - To investigate what can be retrieved from DBPedia in Chinese
- Set up a local DBPedia_zh using Virtuoso

Process of the query

- If a resource is also described in English, simply construct a DBPedia URI using the URL of that Wikipedia page to query the DBPedia_zh
 - For example, use the URI of <http://dbpedia.org/resource/Ginkgo> to query everything about 銀杏
- If nothing can be found about 四物湯 in English, the UniCode of 四物湯 has to be found in order to query the DBPedia_zh. However, it is quite difficult to figure out which property should be used to query. An example could be:

```
select *
```

```
where {?s <http://dbpedia.org/property/name> ?name
```

```
filter regex(str(?name), "\u5730\u9EC3").}
```

find everything about "Ginkgo biloba"

```
select *  
where {  
  ?s <http://dbpedia.org/property/title> ?title .  
  filter regex(str(?title), "Ginkgo biloba") .  
  ?s ?p ?o. }  
}
```

http://dbpedia.org/resource/Ginkgo	
http://dbpedia.org/property/	imageCaption 銀杏葉
http://dbpedia.org/property/	imageWidth 240px
http://dbpedia.org/property/year	1998
http://dbpedia.org/property/name	銀杏
http://dbpedia.org/property/id	32353
http://dbpedia.org/property/title	Ginkgo biloba
http://dbpedia.org/property/color	lightgreen
http://dbpedia.org/property/classis	銀杏綱 Ginkgoopsida
http://dbpedia.org/property/ordo	銀杏目 Ginkgoales
http://dbpedia.org/property/familia	銀杏科 Ginkgoaceae
http://dbpedia.org/property/genus	銀杏屬 Ginkgo
http://dbpedia.org/property/species	銀杏 G. biloba
http://dbpedia.org/property/binomial	Ginkgo biloba

Find information about Rehmannia_glutinosa (地黃)

- A query to the public DBPedia helps to find the Chinese label for Rehmannia_glutinosa as "\u5730\u9EC3". Use this information to query my local DBPedia_zh SPARQL

```
select *  
where {<http://dbpedia.org/resource/Rehmannia_glutinosa> ?p ?o .}
```

- But the information about the negative effects of this ingredient cannot be found from DBPedia