Benefits of Rosemary, Oregano, and Marjoram

Rich source of antioxidants and anti-inflammatory compounds- these are thought to help boost the immune system and improve blood circulation. Laboratory studies have shown rosemary to be rich in antioxidants, which play an important role in neutralizing harmful particles called free radicals.

Improving digestion - In Europe rosemary is often used to help treat **indigestion** - Germany's Commission E has approved it for the treatment of dyspepsia. However, it should be noted that there is currently no meaningful scientific evidence to support this claim.

Enhancing memory and concentration - blood levels of a rosemary oil component correlate with improved cognitive performance, according to research in *Therapeutic Advances in Psychopharmacology*, published by SAGE.

Rosemary has leaves shaped like needles

and pink, white, blue, or purple flowers.

Neurological protection - scientists have found that rosemary is also good for your brain. **Rosemary contains an ingredient, carnosic acid, that is able to fight off free radical damage in the brain.**

According to a study published in *Cell Journal*, carnosic acid "may be useful in protecting against **beta amyloid-induced neurodegeneration in the hippocampus**."[1]

Prevent brain aging - Kyoto University researchers in Japan revealed that **rosemary may significantly help prevent brain aging.**

Cancer - Research published in *Oncolocy Reports* found that "crude ethanolic rosemary extract (RO) has **differential anti-proliferative effects on human leukemia and breast carcinoma cells**."[2]

Another study, published in *Bioscience, Biotechnology and Biochemistry*, concluded that **rosemary may be an effective herbal anti-inflammatory and anti-tumor agent.**[3]

In addition, a report published in the *Journal of Food Science* revealed that adding rosemary extract to ground beef **reduces the formation of cancer-causing agents** that can develop during cooking.

Protection against macular degeneration - a study published in the journal *Investigative Ophthalmology & Visual Science*, led by Stuart A. Lipton, M.D., Ph.D. and colleagues at Sanford-Burnham Medical Research Institute, revealed that **a major component of rosemary, carnosic acid, can significantly promote eye health.**

This could have clinical applications for diseases affecting the outer retina, such as age-related **macular degeneration** - the most common eye disease in the U.S.

Recent developments on health benefits of rosemary from MNT news

Diabetes-fighting potential spotted in culinary herbs - Food scientists have discovered that the popular culinary herbs rosemary, oregano and marjoram contain compounds that may have the potential to manage **type 2 diabetes** in a similar way to some currently prescribed drugs.

Precautions and side effects

Rosemary is usually safe when taken in low doses. However, extremely large doses can trigger the following side effects (although rare):

- vomiting
- spasms
- coma
- **pulmonary edema** (fluid in the lungs)

High doses of rosemary may cause miscarriage. Therefore it's not advisable for pregnant women to take any supplemental rosemary.

Drug interactions

According to the University of Maryland Medical Center[5], rosemary can affect the activity of some medications, including:

- **Anticoagulant drugs -** blood-thinning medications, such as Warfarin, **Aspirin**, and Clopidogrel.
- **ACE inhibitors -** drugs used for treating **high blood pressure**, including lisinopril (Zestril), fosinopril (Monopril), captpril (Capoten), and elaropril (Vasotec).
- **Diuretics -** medications that increase the passing of urine, such as hydrocholorothiazide and furosemide (Lasix).
- **Lithium -** a medication used to treat the manic episodes of manic **depression**. Rosemary can act as a diuretic and subsequently cause lithium to reach toxic levels in the body.

Diabetes-fighting potential spotted in culinary herbs

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Nutrition / Diet
Pharmacy / Pharmacist
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Food scientists have discovered that the popular culinary herbs rosemary, oregano and marjoram contain compounds that may have the potential to manage type 2 diabetes in a similar way to some currently prescribed drugs.

Elvira de Mejia, a professor in the Department of Food Science and Human Nutrition at the University of Illinois at Urbana-Champaign, and colleagues report their findings in the *Journal of Agricultural and Food Chemistry*.

The authors point out, in view of the fact **type 2 diabetes** affects over 8% of Americans and costs the nation around $175 billion a year, there is a need for as many ways to tackle the disease as possible.

While some people can manage the disease with changes to diet and increasing physical activity, and others do so with medication to keep blood glucose in check, not everyone can stick to changes in lifestyle or afford the prescription drugs, they add.

Herbs may offer an alternative way to keep glucose in check

Researchers found that certain herbs, such as rosemary, contain compounds that may have the potential to manage type 2 diabetes naturally.

The researchers note that recent studies have shown herbs may provide an alternative, natural way to keep glucose in check, so they decided to take a closer look.

In their paper, they describe how they investigated the properties of Greek oregano (*Origanum vulgare*), marjoram (*Origanum majorana*), rosemary (*Rosmarinus officinalis*), and Mexican oregano (*Lippia graveolens*).

They prepared extracts of these plants obtained from greenhouse-grown and commercially purchased dried forms and examined their ability to inhibit two enzymes - one called DPP-IV (also calld DPP-4) that plays a role in **insulin** secretion, and another called PTP1B that is involved in insulin signaling.

These enzymes have been identified as targets of drugs for managing **diabetes**. For example, the drugs sitagliptin and metformin are medications in the DPP-4 inhibitor family. However, **searching for inhibitors of PTP1B is proving more challenging**.

Prof. de Mejia and colleagues found that the greenhouse-grown herbs contained more polyphenols and flavonoids than the commercial, dried versions.

Compounds in rosemary, oregano, and marjoram showed ability to inhibit enzymes

They also found that extracts of greenhouse-grown rosemary, Mexican oregano, and marjoram were the best inhibitors of DPP-IV, while extracts from the commercial, dried versions were the best inhibitors of PTP1B.

Further analysis revealed a number of individual compounds contributed to these inhibitory effects.

The team calls for more studies to understand the role of these compounds in reducing the risk of type 2 diabetes in humans.

In January 2014, *Medical News Today* reported a clinical trial that found traditional **Chinese herbal medicines may halt progress of type 2 diabetes**. The researchers said the results show Chinese herbal medicines hold promise for slowing the progression from prediabetes to an official diabetes diagnosis.

Written by **Catharine Paddock PhD**