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Different Herbs and Diet Plan Used In Copd

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ABSTRACT:-Chronic obstructive pulmonary disease is one of the leading causes of morbidity and mortality worldwide and a growing healthcare problem. Identification of modifiable risk factors for prevention and treatment of COPD is urgent, and the scientific community has begun to pay close attention to diet as an integral part of COPD management, from prevention totreatment.

This review summarizes the evidence from observational and clinical studies regarding the impact of nutrients and dietary patterns on lung function and COPD development, progression, and outcomes, with highlights on potential mechanisms ofaction. Several dietary options can be considered in terms of COPD prevention and/orprogression.

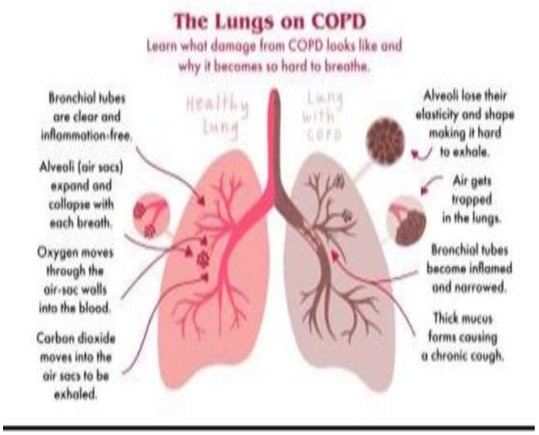
Although definitive data are lacking, the available scientific evidence indicates that some foods and nutrients, especially those nutraceuticalsendowed with antioxidant and anti-inflammatory properties and when consumed in combinations in the form of balanced dietary patterns, are associated with better pulmonary function, less lung function decline, and reduced risk ofCOPD.

Knowledge of dietary influences on COPD may provide health professionals with an evidence-based lifestyle approach to better counsel patients toward improved pulmonaryhealth.

I. INTRODUCTION:-

Chronic obstructive pulmonary disease (**COPD**) is a type of obstructive lung disease characterized by long-term breathing problems and poor airflow.

- COPD is a progressive disease, meaning it typicallyworsens overtime.
- A group of lung diseases that block airflow and make itdifficult tobreathe.
- COPD is a progressive disease, meaning it typicallyworsens overtime.
- Eventually, everyday activities such as walking or getting dressed becomedifficult.
- Chronic bronchitis and emphysema are older terms used for different types of COPD.The term "chronic bronchitis" isstill used to define a productive cough that is present for at least three months each year for twoyears.
- Those with such a cough are at a greater risk of developing COPD.The term "emphysema" is also used for the abnormal presence of air or other gas withintissues.



(Fig .The Lungs On COPD)

Symptoms:-

Early symptoms include:

- occasional shortness of breath, especially afterexercise
- mild but recurrentcough
- needing to clear your throat often, especially first thing in the morning
- shortness of breath, after even mild exercise such as walking up a flight of stairs wheezing, which is a type of higher pitched noisy breathing, especially duringexhalations
- chesttightness
- chronic cough, with or withoutmucus
- need to clear mucus from your lungs everyday
- frequent colds, flu, or other respiratoryinfections
- lack ofenergy

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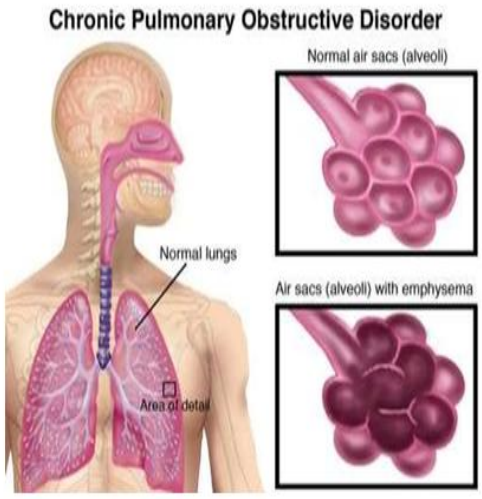
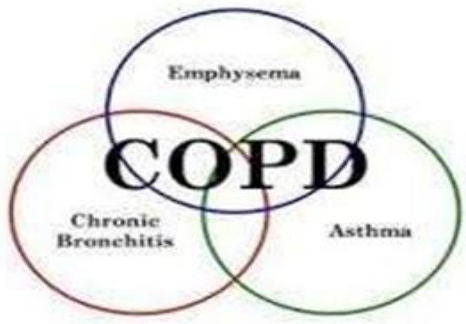


❖ **In later stages of COPD, symptoms may alsoinclude:**

- fatigue
- swelling of the feet, ankles, orlegs
- weightloss
- you have bluish or grey fingernails or lips, as this indicates low oxygen levels in yourblood
- you feel confused, muddled, orfaint
- your heart isracing
- you have troublecatching
- your breath or cannottalk

Types of COPD:-

1) Emphysema
2) ChronicBronchitis
3) Asthma



(**Fig**.COPD Types)

1) Emphysema:

- This results from damage to your lungs' air sacs (alveoli) that destroysthewallsinsidethemandcausesthemtom ergeintoone giant airsac.
- It can't absorb oxygen as well, so you get less oxygen in your blood.
- Damaged alveoli can make your lungs stretch out and lose their springiness.
- Air gets trapped in your lungs and you can't breathe it out, so you feel short ofbreath.

2) Chronicbronchitis:

- Ifyouhavecoughing,shortnessofbreath,andmucusthatlingers at least 3 months for 2 years in a row, you have chronic bronchitis.
- Hair-like fibres called cilia line your bronchial tubes and help move mucusout.
- When you have chronic bronchitis, you lose your cilia. This makes it harder to get rid of mucus, which makes you cough more, which creates moremucus

3) RefractoryAsthma:

- This type may also be called noreversible.
- It doesn't respond to normal asthma medications. Moderate: Your airflow isworse.

 Severe: Your airflow and shortness of breath areworse.

 Verysevere:Yourairflowislimited,yourflaresare moreregular and intense, and your quality of life ispoor.

Treatment:-

There are many treatments for chronic obstructive pulmonary disease. The first and best is to stop smoking immediately.

Medical treatmentsofchronicobstructivepulmonary disease drugs for example nicotine replacement therapy,beta-2agonists and anticholinergic agents (combined drugs using steroids andlong-actingbronchodilators,mucolyticagents,oxygentherapy, andsurgicalproceduressuchasbullectomy,lungvolumereduction surgery, and lungtransplantation

Stages:

The treatments are often based on the stage of chronic obstructive pulmonary disease are

 Stage I - short-acting bronchodilators asneeded

 Stage II - short-acting bronchodilator as needed and long-acting bronchodilators plus cardiopulmonaryrehabilitation

 Stage III - short-acting bronchodilator as needed long-acting bronchodilators cardiopulmonary rehabilitation and inhaled glucocorticoids for repeatedexacerbations

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- **Stage IV** - as needed, long-acting bronchodilators, cardiopulmonary rehabilitation, inhaled glucocorticoids, long-termoxygentherapy,possiblelungvolumereductionsurgeryand possible lung transplantation (stage IV has been termed "end- stage" chronic obstructive pulmonarydisease)

Herbs Used In COPD:-

a) Thyme (ThymusVulgaris):

(fig. Thyme**)**

- This time- honour culinary and medicinal herb prized for its aromatic oils has a generous source of antioxidantcompounds.
- It may also help airways relax, improving airflow into thelungs.
- Whether this translates to real relief from the inflammation and airway constriction of COPD remains lessclear.
- Thymeisveryhighinantioxidantslikeapigeninandluteolin,and this is good for your COPD
- It antioxidants help your body fightinflammation.
- Thyme extract increases mucociliary-beating frequency in primary cell lines from chronic obstructive pulmonary disease patients

b) English Ivy (HederaHelix):

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(**fig**.English Ivy)

- This herbal remedy may offer relief from airway restriction and impaired lung function associated withCOPD.
- While promising, rigorous research on its effects on COPD is lacking.
- Ivy can cause skin irritation in some people and ivy extract is not recommended for people with an allergy to theplant.
- Ivy extract effective in improving lung function in children with chronic bronchialasthma.

c) Ginseng (PanaxGinseng):

(**fig**.Ginseng)

- These Asian herbwas superior to a placebo for the relief of COPDsymptoms.

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- People taking ginseng experienced significant improvements in breathing and the ability to perform exercise, compared to similar subjects who received an inactivetreatment.
- The effects of a combination therapy, which included ginseng and other Asian traditional healing herbs, versus no treatment atall.
- The ginseng-based herbal blend experienced significant improvements in all measures of lung function, compared to subjects who received notreatment.

d) Curcumin:

(fig. Curcumin**)**

- Curcumin is commonly found in turmeric (Curcumalonga).
- Long used in traditional Asian medicine, curcumin has reduced airwayinflammation.
- Apowerfulantioxidant,curcumintheoxidativestressbelieved to underlie COPD, while blocking inflammation at the molecularlevel.
- Is also being done into the possibilities of using curcumin in the treatment ofCOPD.
- Curcumin is believed to be safe and well-tolerated, even at highdoses.
- Curcumin's ability to prevent, reverse, or improve a wide range of ailments andcondition

e) Red Sage (SalviaMiltiorrhiza):

(fig.Red sage)

- Antioxidants are natural substances that can help reduce inflammation, and **red sage** contains a high amount of an antioxidant called tanshinoneII.
- Thisantioxidantisbeneficialfor**COPD**patientsbecauseithelps regulate the response of a type of white blood cells known as neutrophils
- Red sage is an effective antioxidant, protecting the linings of bloodvesselsfrominjurywhenoxygenistemporarilycutoffand then resumed, as in the case of COPDexacerbations.

f) Melatonin:

(fig.Metation)

- Melatonin increases the sleep quality in certain COPD patients, but its effectiveness is not

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yetclear.

- This randomized, double-blind, placebo-controlled trial included 52 moderate to severe COPD patients with poor sleep quality.
- Primarily know as an aid for sleeping this study trusted source showsthatmelatoninhelpsreduceoxidativestress inpeoplewith COPD, making it easier tobreathe
- Further research must be done for its long-term effects on COPD.

Diet Plan Of COPD Patient:-

- Use herbs or no-salt spices to flavour yourfood.
- Don't add salt to foods whencooking.
- Read food labels and avoid foods with more than 300 mg sodium/serving.
- Before using a salt substitute check with your doctor. Salt substitutes might contain other ingredients that can be just as harmful assalt.
- MakesureyouaregettingenoughcalciumandvitaminDtokeep your boneshealthy.
- Goodsourcesofthesenutrientsarefoodsmadefrommilk(milk, cheese, yogurt, ice cream, and pudding) and foods fortified with calcium and VitaminD.
- You may need to take calcium and Vitamin Dsupplements.
- Maintaining a healthy weight and exercising will also help with keeping boneshealthy.
- Wearyourcannulawhileeatingifcontinuousoxygen is prescribed.
- Since eating and digestion require energy, your body will need the oxygen.
- Avoid overeating and foods that cause gas orbloating.
- A full stomach or bloated abdomen might make breathing uncomfortable.
- Avoid the foods that cause gas orbloating.
- Some foods that cause gas for some peopleinclude
- Carbonatedbeverages
- Fried, greasy, or heavily spicedfoods
- Apples, avocados, andmelons
- Beans, broccoli, Brussels sprouts, cabbage, cauliflower, corn, cucumbers, leeks, lentils, onions, peas, peppers, pimentos, radishes, scallions, shallots, andsoybeans
- Ifyoutakediuretics(waterpills),youmightalsoneedtoincrease your potassiumintake.
- Some foods high in potassium include oranges, bananas, potatoes, asparagus, andtomatoes.

If you are short of breath while eating or right after meals, trythese tips:

- Clear your airways at least one hour beforeeating.
- Eat more slowly. Take small bites and chew your food slowly, breathing deeply while chewing. Try putting your utensils down betweenbites.
- Choose foods that are easy tochew.
- Try eating five or six small meals a day instead of three large meals. This will keep your stomach from filling up too much so your lungs have more room toexpand.
- Try drinking liquids at the end of your meal. Drinking before or during the meal might make you feel full orbloated.
- Eat while sitting up to ease the pressure on yourlungs.

Grains:-

- Eatwhole-graincereals,breads,crackers,rice,orpastaeveryday.
- 1 oz. is about 1 slice of bread, 1 cup of cereal, or a half cup of cooked rice, cereal, orpasta.
- Eat 6 ozdaily.

Vegetables:

- Eat more dark green veggies like broccoli and more orange veggies likecarrots.
- Eat more dry beans and peas like pinto beans andlentils.
- Eat 2.5 cupsdaily.

Fruits:

- Eat a variety of freshfruit.
- Choose fresh, frozen, canned or driedfruit.
- Go easy on fruitjuices.
- Eat 2 cupsdaily.

Mil:

- Choose low-fat or fat-free milk, yogurt, and other milkproducts.
- If you don't or can't consume milk, choose lactose-free products or calcium-fortified foods orbeverages.
- Have 3 cupsdaily.

Meat and Beans:

- Chooselow-fatorleanmeatsandpoultry.Bakeitbroilit,orgrillit.
- Vary your protein routine-choose more fish, beans, peas, nuts, andseeds.

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- Eat 5.5 oz.daily.

If you are often too tired to eat later in the day, here are some guidelines:

- Choose foods that are easy to prepare. Save your energy for eating, otherwise you might be too tired toeat.
- Ask your family to help with mealpreparations.
- Check to see if you are eligible to participate in your local Meals on Wheelsprogram.
- Freeze extra portions of what you cook so you have a quickmeal when you're tootired.

General guidelines:-

- Talk to your doctor. Sometimes, poor appetite is due to depression which can be treated. Your appetite is likely to improve after depression istreated.
- Avoid non-nutritious beverages such as black coffee andtea.
- Try to eat more protein and fat, and less simplesugars.
- Eat small, frequent meals andsnacks.
- Walk or participate in light activity to stimulate yourappetite.
- Keep food visible and within easyreach.

Meal guidelines:

- Drink beverages after a meal instead of before or during a meal so that you do not feel asfull.
- Plan meals to include your favoritefoods.
- Try eating the high-calorie foods in your mealfirst.
- Useyourimaginationtoincreasethevarietyoffood you'reeating.

Snack guidelines:

- Don't waste your energy eating foods that provide little or no nutritional value (such as potato chips, candy bars, colas, and other snackfoods).
- Choose high-protein and high-caloriesnacks.
- Keep non-perishable snacks visible and within easyreach.

Dining guidelines:

- Make food preparation an easy task. Choose foods that are easy to prepare andeat.
- Makeeatingapleasurableexperience,notachore. Liven up your meals by using colourful place settings. Play background music duringmeals.
- Eat with others. Invite a guest to share your meal or go out to dinner.
- Use colourful garnishes such as parsley and red or yellow peppers, to make food look more appealing andappetizing.

Alcohol guidelines:-

- Ask your doctor for specific guidelines regarding alcohol. Your doctor might tell you to avoid or limit alcoholic beverages. Alcoholic beverages do not have much nutritional value and can interact with the medicines youare taking, especially oral steroids. Too much alcohol might slow your breathing and make it difficult for you to cough upmucus.

Tips for gaining weight:

- Drink milk or try one of the "High Calorie Recipes" listed below instead of drinking low-caloriebeverages.
- Ask your doctor or dieticians about nutritional supplements. Sometimes, supplements in the form of snacks, drinks (such as Ensure or Boost) or vitamins might be prescribed to eat between meals.Thesesupplementshelpyouincreaseyourcaloriesandget the right amount of nutrientsevery
- **Note: Do not use supplements in place of yourmeals.**
- Avoidlow-fatorlow-calorieproductsunlessyouhavebeengiven otherdietaryguidelines.Usewholemilk,wholemilkcheese,and yogurt.
- Use the "Calorie Boosters" listed in this article to add calories to your favouritefoods.
- Adding fresh or frozen fruit to your shakes can giveyou different consistencies and morevariety.

High-caloriesnacks:

- Icecream
- Cookies
- Pudding
- Cheese
- Granolabars
- Custard
- Sandwiches
- Nachos withcheese
- Eggs
- Crackers with peanutbutter
- Bagels with peanut butter or creamcheese
- Cereal with half and half
- Fruit or vegetables withdips
- Yogurt withgranola
- Popcorn with margarine and parmesancheese
- Bread sticks with cheesesauce

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Eat a variety of foods from all the food groups to get all the nutrients you need.

High-calorie recipes to promote weight gain:
If you are having difficulty maintaining a healthy weight, try some of these "Calorie Boosters."
Super Shake:
Ingredients:
- 1 cup wholemilk
- 1 cup ice cream (1-2scoops)
- 1 package Carnation InstantBreakfast

Directions-Pour all ingredients into a blender. Mix well. Makes one serving; 550 calories per serving.
Chocolate Peanut Butter Shake:
Ingredients:
- 1/2 cup heavy whippingcream
- 3 tablespoons creamy peanutbutter
- 3 tablespoons chocolatesyrup
- 1-1/2 cups chocolate icecream

Directions -Pour all ingredients into a blender. Mix well. Makes one serving; 1090 calories per serving.

Super Pudding:
Ingredients:
- 2 cups whole milk
- 2 tablespoons vegetableoil
- 1 package instantpudding
- 3/4 cup non-fat, dry milkpowder

Directions -Blend milk and oil. Add pudding mix and mix well. Pour into dishes (1/2 cup servings). Makes four 1/2 cup servings; 250 calories per serving.

Great Grape Slush:
Ingredients:
- 2 grape juicebars
- 1/2 cup grape juice or7-up
- 2 tablespoons cornsyrup
- 1 tablespoon cornoil

Directions -Pour all ingredients into a blender. Mix well. Makes one serving; 490 calories per serving.

Calorie Boosters:
If you are having difficulty maintaining a healthy weight, try some of these calorie boosters:

Food Item: Egg yolk or whole egg
- **Suggested Use:** Before cooking, add egg yolk or whole egg to foods such as meat loaf, rice pudding, or macaroni and cheese. (To prevent illness, avoid the use of uncookedeggs.)

Food Item: Non-fat powdered milk or undiluted evaporated milk

- **Suggested Use:** Add to beverages (including milk) or to these foods: creamed soups, yogurt, scrambled eggs, casseroles, pudding, mashed potatoes, custard, gravies, hot cereal, and/or sauces.

FoodItem: Creamcheeseorshredded,melted,sliced,cubed,orgrated cheese
- **SuggestedUse:**Addtosandwiches,snacks,casseroles,crackers, eggs, soups, toast, pasta, potatoes, rice or vegetables, or serve as asnack.

Food Item: Vegetable oils, mayonnaise, butter, margarine, or sour cream
- **Suggested Use:** Add margarine or mayonnaise to sandwiches; add any of these items to bread, casseroles, soups, eggs, cooked cereals, pasta, potatoes, rice, vegetables,pudding.

Food Item: Peanut butter (creamy or crunchy)

- **Suggested Use:** Spread on bread, crackers, apples, bananas, or celery. Or add to cereal, custard, cookies, or milkshakes.

Food Item: Nut dust (grind any type of nuts in a blender or food processor)
- **Suggested Use:** Add to puddings, gravy, mashed potatoes, casseroles, salads, andyogurt.

Food item: Miscellaneous foods (limit to one serving per day)
- **Suggested Use:**
  - Add: **sugar, jelly, jam preserves, honey, corn syrup, maplesyrup**
  - To: hot cereal, cold cereal, fruit, fruit salad, sweet potatoes, wintersquash

II. CONCLUSION:-

- COPDbeingachronicprogressivediseasewithirreversiblechanges needsearlydiagnosisandpropermanagement.An extracareofdiet, diet- pattern modifications and life style modifications with judicious use of Rasayana can play major role in the prevention or progression.
- Given the alarming increasing burden of COPD worldwide, identificationofmodifiableriskfactorsforpreventionandtreatment of COPD is highly in demand. Based on the available evidence, greater awareness of diet and dietary factors influencing respiratory health may be of interest for public health due to their disease-

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modifyingeffects.

- Many studies in the general population and in subjects with respiratory disease have reported that current dietary habits are qualitatively poor and therefore leave plenty of opportunities for improvementsandinterventions.Takingintoaccount theincreasing smoking habit in developing countries and the worldwide unstoppable phenomenon of Westernization of lifestyle factors, including a more processed and convenience-orientated diet, a two- hit lifestyle burden (smoking and unhealthy diet) is currentlyrising.
- Based on strong evidence of association with improved cardio metabolic health, including lower risk of CV disease, diabetes, and obesity, many scientific organizations recommend the prudent/Mediterranean-like diets as healthy dietarypatterns.
- Published studies also consistently show the adverse effects of the Westerndiet,richinrefinedfoods,saturatedfat,meat,andsugar,on lung function and the risk of COPD, and, by contrast, the ability of specificdietaryfactorsanddiets,mostlythepruden t/Mediterranean- like diets loaded by plant. Interestingly, the magnitude of effect of dietonlungfunctionisestimatedtobecomparablet othatofchronic smoking underscoring that healthy dietary approaches may have a great impact jointly on COPD development and the associated metabolic and CVrisk
- Interestingly, in many studies, specific dietary patterns and/or nutrients exerted benefits on lung function and the risk of COPD, but not asthma, strongly suggesting a true underlying effect rather than a generalized and most probably confoundedeffect.
- COPD as well as CV diseases share a systemic inflammatory pathogenesis differently from the immune pathogenesis of asthma. Nutritional targeting of oxidative balance and overwhelming inflammation may therefore represent a unique opportunity to prevent/treat COPD and its related CVco-morbidities.

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