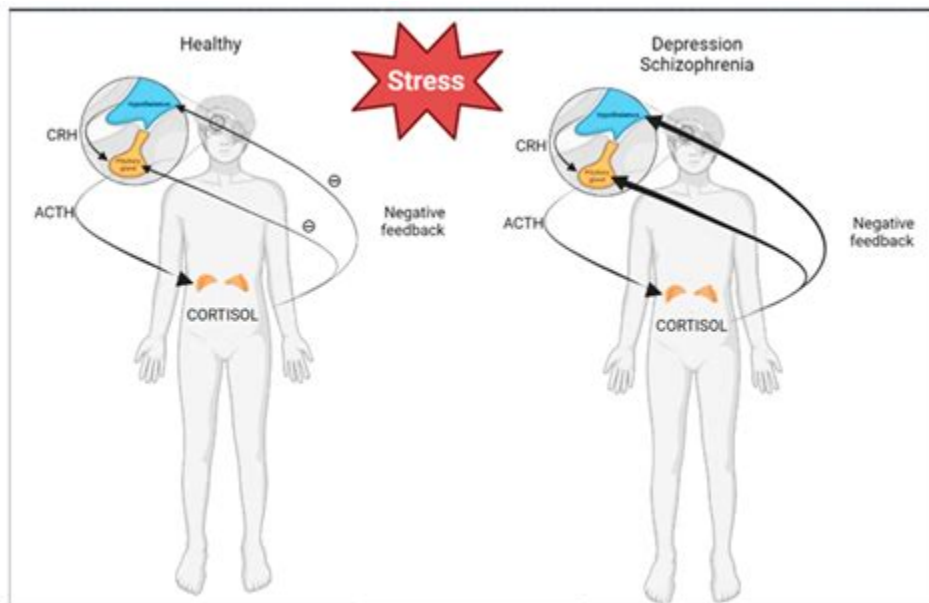


Prolactin promotes metabolic homeostasis in rodents. Serum PRL decreases in rodents with obesity, diabetes, and insulin resistance (2, 7-10), suggesting a role for reduced PRL levels in the pathophysiology of metabolic diseases. As a proof of concept, PRL treatment in mice and rats with streptozotocin (STZ)-induced diabetes or diet-induced obesity improves their metabolic profile (2, 11, 12).



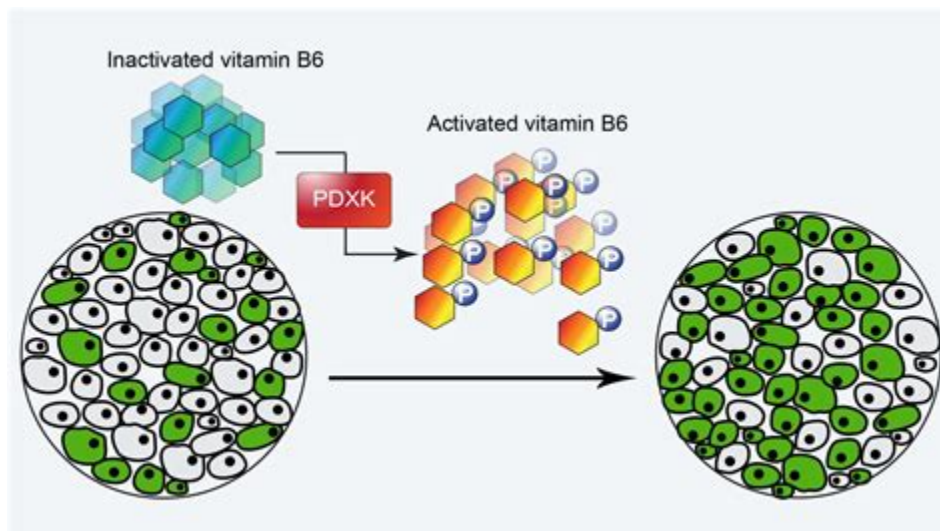
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## The Involvement of Prolactin in Stress-Related Disorders - PMC



men, sexual dysfunction and low testosterone and gonadotrophin levels increases the risk of compromised BMD. If these patients have these symptoms for 3-6 months then they should be referred for further investigation. Serum prolactin levels returning to normal levels will prevent further bone loss, but the BMD will never return to normal.

## Research Breakdown on Vitamin B6 - Examine

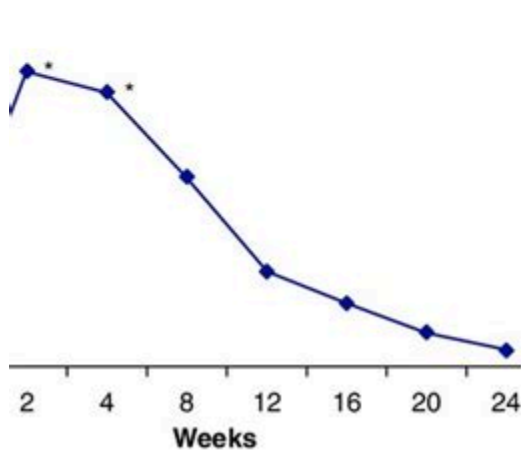


High Prolactin Low Testosterone - 7 ways to lower prolactin in men! High Prolactin Low Testosterone (High Prolactin Low Testosterone, written by David Jaynes) A lot of what we talk about on this site is stuff you've already heard of. Testosterone. Exercise. Masturbation. Belly fat. Eating more steak. Drinking less beer.

## Prolactin levels: Test, ranges, results, and treatment - Medical News Today

Baseline	Week 2	$p^*$	Week 24
23.3 ± 8.8	18.2 ± 8.2	<0.05	8.7 ± 6.1
37.6 ± 22.5	25.2 ± 17.3	<0.05	14.0 ± 17.0
52.2 ± 19.3	41.8 ± 21.6	<0.05	22.2 ± 16.4

eline and week 2.  
 seline and week 24.  
 rchiatric Rating Scale; SAPS, Scale for the Assessment of Positive Symptoms; SA  
 Negative Symptoms.



with baseline ( $176.7 \pm 35.1$  and  $53.7$ ) and week 24 ( $194.4$  and  $53.7$ ). Total cholesterol levels increased significantly from baseline ( $106.4 \pm 30.9$  and  $43.8$ ), but this significance was not maintained to week 24 ( $116.5 \pm 39.7$  and  $43.8$ ). Hence, the difference from baseline was not significant. High-density lipoprotein (HDL) cholesterol, apolipoprotein A1, apolipoprotein B, leptin or adiponectin levels were not significantly different from baseline indices (total cholesterol /

Doctors measure the hormone levels in nanograms per milliliter (ng/ml). Typical normal levels are: females: less than 25 ng/ml. males: less than 17 ng/ml. However, the normal range may vary .

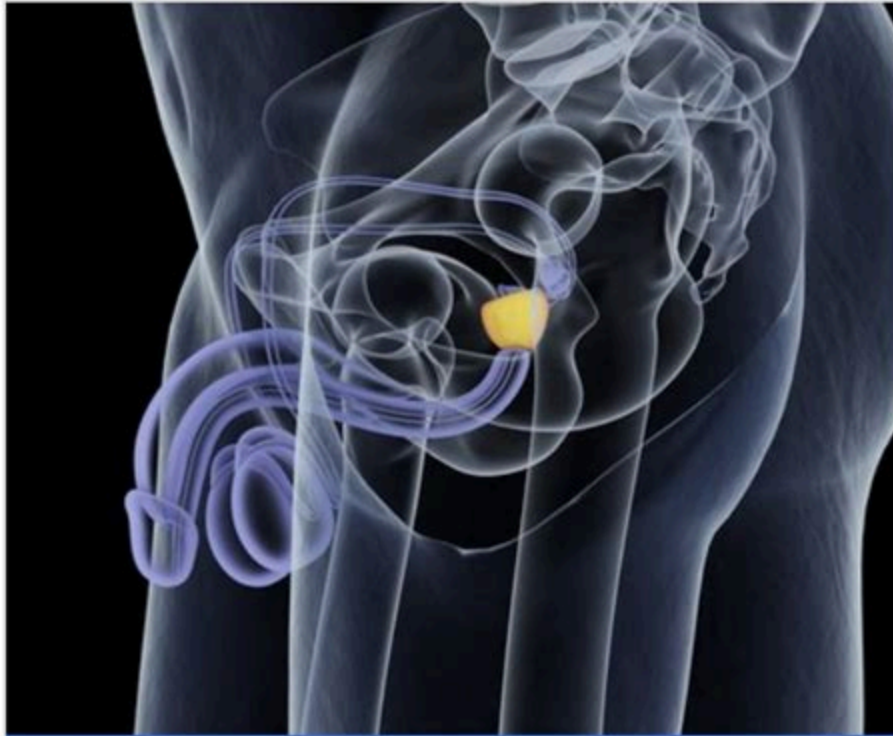
## Prolactin Level Test: Purpose, Procedure, and Results - Healthline

### Prolactin Level Test

purpose, procedure, results, treatments

A recent study [65] has proposed that vitamin B 6 could reduce prolactin levels, and therefore, the effectiveness of vitamin B 6 for reducing serum prolactin in patients with.

## **High Prolactin Low Testosterone - 7 ways to lower prolactin in men!**



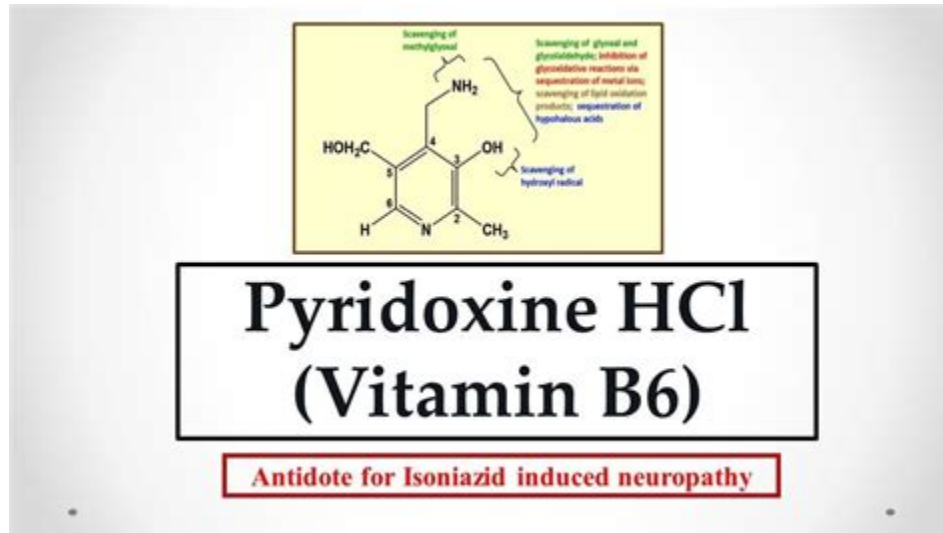
# High Prolactin Low Testosterone

(High Prolactin Low  
Testosterone, written by David  
Jaynes) A lot of what we talk  
about on this site is stuff[...]

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1 Take the medication cabergoline to treat your tumor. This medication is the first one that doctors will go to, as it has the fewest side effects and you only need to take it twice a week. It will most likely shrink the benign tumor and bring your prolactin levels down over time. [3]

## Effects of pyridoxine hydrochloride (vitamin B6) on . - PubMed



It was initially thought that intestinal uptake of vitamin B6 as pyridoxine hydrochloride, [13] [14] pyridoxal (including its phosphate form [15]), and pyridoxamine (as well as its phosphate [16]) were via passive diffusion in the rat. Human studies on isolated intestinal cells (Caco-2) have noted a saturatable transporter which is concentration and pH dependent, capable of absorbing PLP and .

## **AYURVEDIC TREATMENT LOWER PROLACTIN LEVEL**

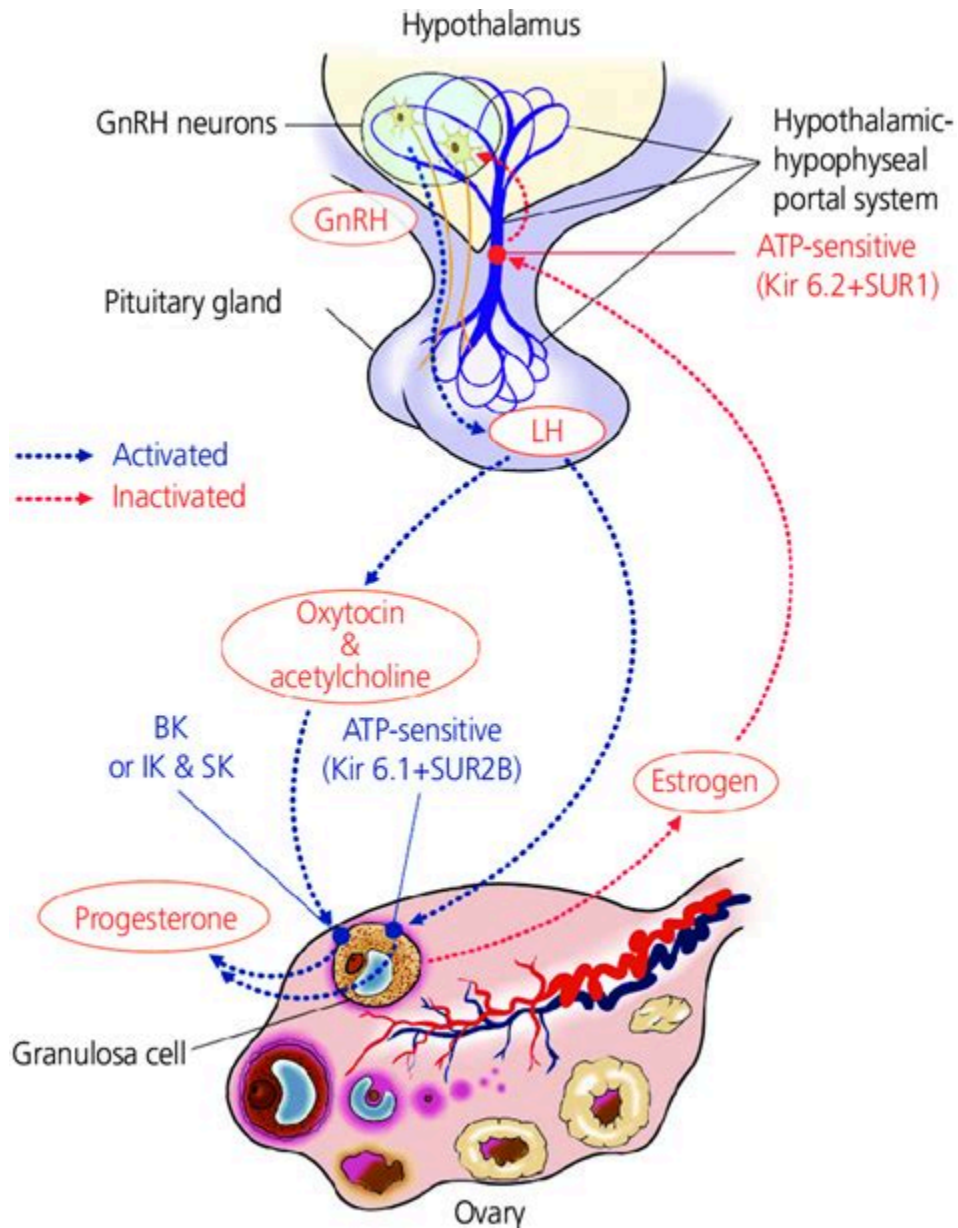
<b>Detoxification to get rid of toxins and inflammation in the body.</b>	
<b>Ignite digestive fire to promote digestion and nutritional sufficiency.</b>	
<b>Hormone Balance to support regular ovulation &amp; boost fertility.</b>	
<b>Promote Mental wellness to Reduce Stress &amp; Prolactin production.</b>	
<b>Rejuvenation with rasayana to boost immunity &amp; raise energy level.</b>	
<b>Balanced Nutrition with individual specific diet to nurture body tissues.</b>	
<b>Yoga, Pranayama &amp; Meditation to promote bone health, weight loss &amp; physical strength.</b>	

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Hence should preferably be assessed in the morning as it define when fasting serum level of more than 20ng/ml in men & more than 25 ng/ml in women<sup>4</sup>. Hyperprolactinemia is estimated to be present in 25% among women with galactorrhea& 9% of women with amenorrhea & high as 70% among women with both galactorrhea& amenorrhea.



**Effect of vitamin B6 on the serum concentration of pituitary hormones .**



Males — When a high blood prolactin concentration interferes with the function of the testicles, the production of testosterone (the main male sex hormone) and sperm production decrease. Low testosterone causes decreased energy, sex drive, muscle mass and strength, and blood count (anemia). If levels remain low for several years, bone .

## The Role of Vitamin B6 in Reducing Serum Prolactin in . - ResearchGate



7 min read What Is a Prolactin Test? A prolactin (PRL) blood test measures how much of a hormone called prolactin you have in your blood. The hormone is made in your pituitary gland, which.

## **AYURVEDIC TREATMENT LOWER PROLACTIN LEVEL**

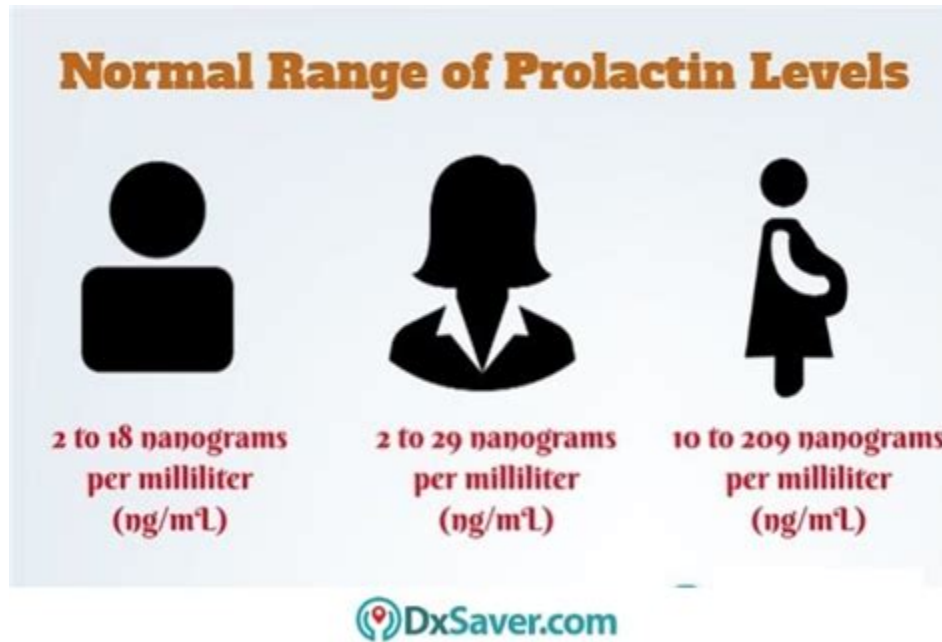
Detoxification to get rid of toxins and inflammation in the body.	
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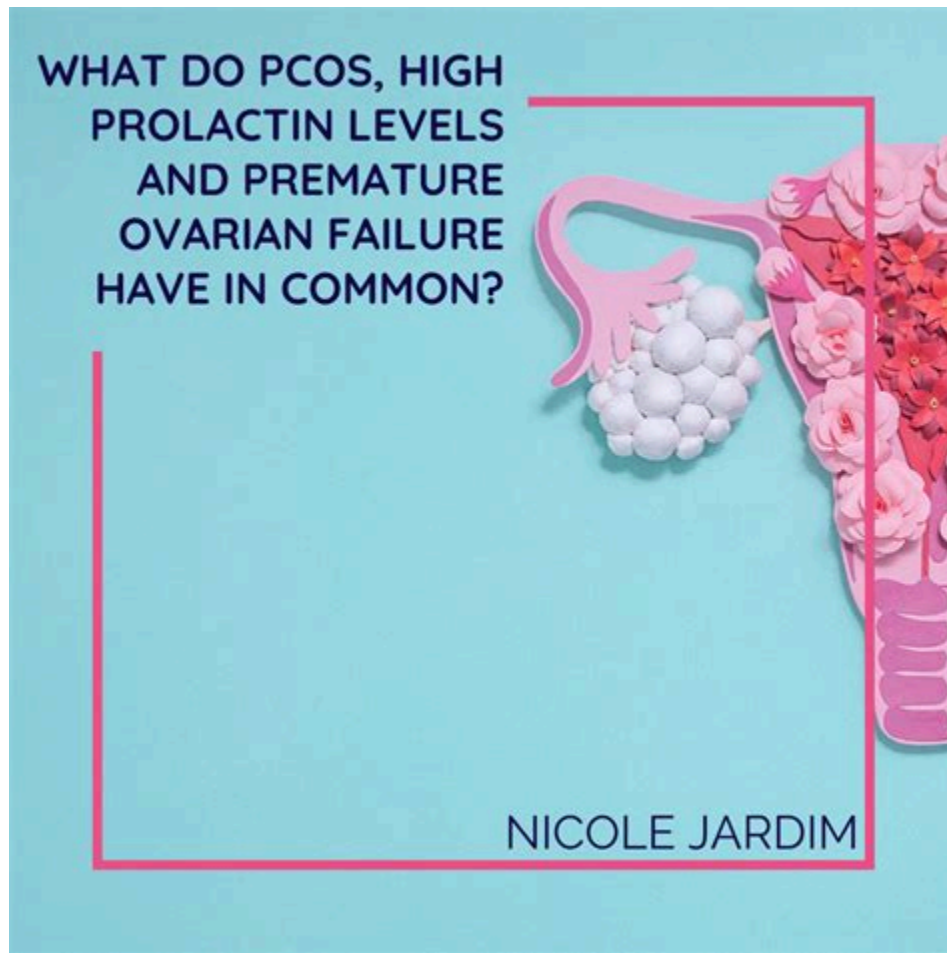
DOI: 10. 3389/fpsy. 2021. 681418 Abstract This study aimed to investigate the safety and efficacy of high-dose vitamin B6 (vB6) as an adjunct treatment for antipsychotic-induced hyperprolactinemia (AIHP) in male patients with treatment-resistant schizophrenia (TRS).

## Prolactin Levels Test: High vs. Low, Normal Range - WebMD



To investigate if vitamin B6 inhibits prolactin release and to compare this effect to that of bromocriptine, a known suppressor of prolactin release, a study was conducted in male rats. . Effects of pyridoxine hydrochloride (vitamin B6) on chlorpromazine-induced serum prolactin rise in male rats J Pharm Sci. 1979 Sep;68(9):1179-81. doi: 10. .

## Patient education: High prolactin levels and prolactinomas . - UpToDate



1. Prolactinoma One of the causes of high prolactin can be prolactinoma. How to reduce prolactin in this case? Cabergoline and bromocriptine are the most often used drugs for the treatment of prolactinoma. These drugs tend to lower the production of prolactin as well as decrease the size of the tumor.



## Safety and Efficacy of High-Dose Vitamin B6 as an Adjunctive Treatment for Antipsychotic-Induced Hyperprolactinemia in Male Patients With Treatment-Resistant Schizophrenia

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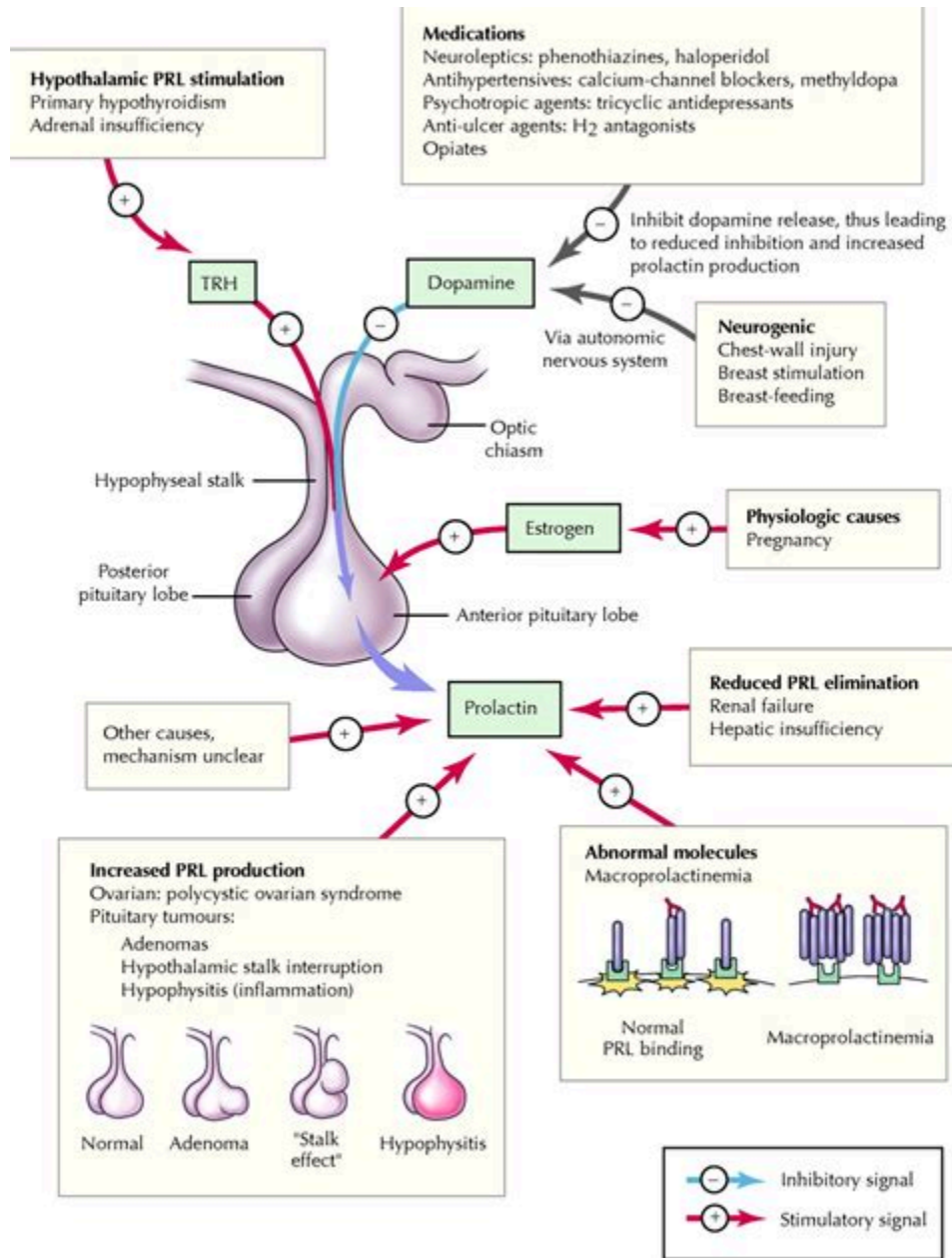
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Front. Psychiatry 12:681418.  
doi: 10.3389/fpsy.2021.681418

This study aimed to investigate the safety and efficacy of high-dose vitamin B6 (vB6) as an adjunct treatment for antipsychotic-induced hyperprolactinemia (AIHP) in male patients with treatment-resistant schizophrenia (TRS). In this randomized double-blinded controlled study, patients were randomized (1:1) into a control group given aripiprazole (ARI; 10 mg/day;  $n = 100$ ) or an intervention group given vB6 (300 mg/12 h for 16 weeks;  $n = 100$ ). Prolactin levels, psychotic symptoms [Positive and Negative Syndrome Scale (PANSS)], cognitive function [MATRICS Consensus Cognitive Battery (MCCB)], liver function, kidney function, growth hormone level, micronutrient levels, blood lipids, and adverse secondary effects (ASEs) [Treatment Emergent Symptom Scale (TESS) and Barnes-Akathisia scale] were monitored. After a 16-week treatment period, the vB6 group showed a 68.1% reduction in serum prolactin levels (from  $95.52 \pm 6.30 \mu\text{g/L}$  to  $30.43 \pm 18.65 \mu\text{g/L}$ ) while the ARI group showed only a 37.4% reduction (from  $89.07 \pm 3.59 \mu\text{g/L}$  to  $55.78 \pm 7.39 \mu\text{g/L}$ ). During weeks 1–4, both treatments reduced prolactin similarly. Subsequently, the ARI effect plateaued, while the vB6 effect remained robust. The vB6 group showed better alleviation of psychotic symptoms and cognitive impairment. No serious ASEs were observed; ASEs were more frequent in the ARI group. AIHP reduction efficacy of vB6 was associated with baseline prolactin and triglyceride levels, total vB6 dosage, and education level. In conclusion, compared with the ARI

Articles / Prolactin Prolactin is a hormone that's responsible for lactation, certain breast tissue development and milk production. Higher-than-normal levels of prolactin in your blood can cause certain symptoms, such as irregular periods, infertility and erectile dysfunction. Contents Overview Resources Overview What is prolactin?

# Hyperprolactinemia: What It Is, Causes, Symptoms & Treatment



These two steps are crucial to rule out hypothyroidism or medication adverse effects as an underlying cause of prolactin excess symptoms. In males, serum prolactin levels range from 2 to 18 ng/ml, in females 2 to 30 ng/ml, and during the third trimester of pregnancy, 10 to 210 ng/ml.

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**Pluripotent Stem Cell Heterogeneity**

Yohei Hayashi<sup>1</sup>, Kiyoshi Ohnuma<sup>2,3</sup>

Affiliations + expand

PMID: 31016596<sup>PMID</sup> DOI: 10.1007/978-3-030-11096-3\_6<sup>DOI</sup>

Abstract

Pluripotent stem cells (PSCs), including embryonic stem cells and induced pluripotent stem cells, show heterogeneity with respect to their pluripotency, self-renewal ability, and other traits. PSC

CITE

Hayashi Y, Ohnuma K, Furue MK. Pluripotent Stem Cell Heterogeneity. Adv Exp Med Biol. 2019;1123:71-94. doi: 10.1007/978-3-030-11096-3\_6<sup>PMID</sup>. PMID: 31016596<sup>PMID</sup>.

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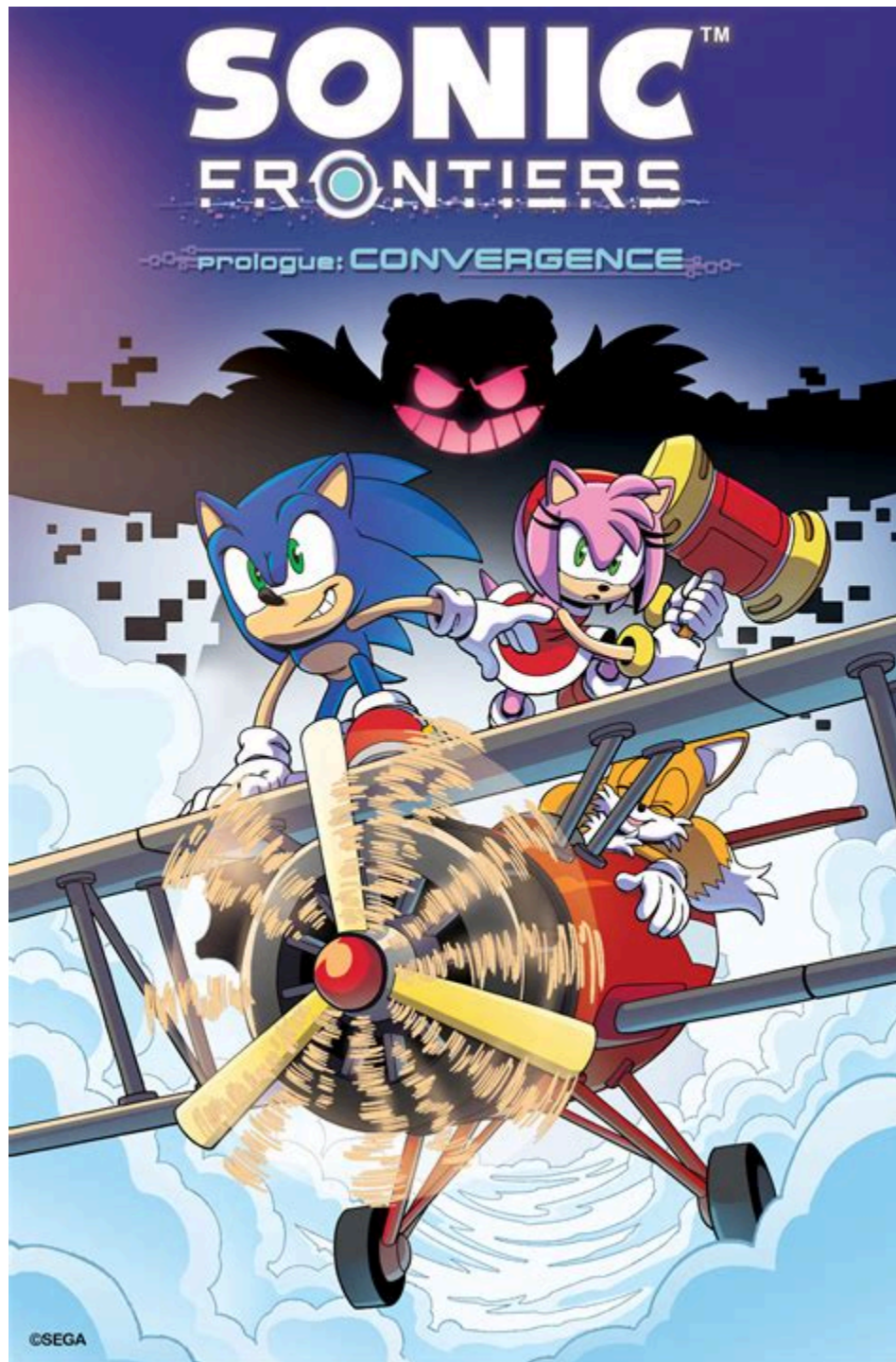
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Safety and Efficacy of High-Dose Vitamin B6 as an Adjunctive Treatment for Antipsychotic-Induced Hyperprolactinemia in Male Patients With Treatment-Resistant Schizophrenia



## Frontiers | Safety and Efficacy of High-Dose Vitamin B6 as an .



The normal range for prolactin is 2 to 18ng/mL and anything above 25ng/mL is considered hyperprolactinemia. The half-life of prolactin is about 15-20 minutes, so if you block its synthesis, you can drop it rather quickly. Let's discuss some side effects of chronically elevated prolactin. What is a high prolactin level in males


## Physiology, Prolactin - StatPearls - NCBI Bookshelf



Alternatively, vitamin B6 is often recommended, which has been reported to lower prolactin levels by influencing levels of dopamine. Additionally, some natural treatments that lower prolactin levels are often recommended, such as reducing alcohol intake, reducing stress with yoga or meditation, or taking herbal medicine called chaste berry .

## **AYURVEDIC TREATMENT LOWER PROLACTIN LEVEL**

Detoxification to get rid of toxins and inflammation in the body.	
Ignite digestive fire to promote digestion and nutritional sufficiency.	
Hormone Balance to support regular ovulation & boost fertility.	
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Overview Prolactinoma Causes Symptoms in females Symptoms in males Mood disorders Diagnosis Treatment Summary Prolactin is a hormone produced by the pituitary gland. High levels can affect.

## learning zone

CONTINUING PROFESSIONAL DEVELOPMENT

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Non-medical  
prescribing multiple  
choice questionnaire

Page 59

Read Gill Knott's  
practice profile on  
liver cirrhosis

Page 60

Guidelines on how to  
write a practice profile

# Non-medical prescribing using the British National Formulary

NS426 Kaufman G (2008) Non-medical prescribing using the *British National Formulary*. *Nursing Standard*. 22, 20, 51-56. Date of acceptance: October 26 2007.

### Summary

This article explores how to maximise efficient use of the *British National Formulary* (BNF) within the context of non-medical prescribing. It provides an overview of the layout of the BNF and identifies how the publication can be used to detect contraindications and potential drug interactions. The detection, recording and reporting of adverse drug reactions are also explored. In addition, prescription writing standards and the meaning of unlicensed and 'off label' medicines are discussed.

### Author

Gerri Kaufman is lecturer, University of York, York.  
Email: gk8@york.ac.uk

### Keywords

**Adverse drug reactions and interactions; British National Formulary; Prescribing; Yellow card reporting**

These keywords are based on the subject headings from the British Nursing Index. This article has been subject to double-blind review. For author and research article guidelines visit the *Nursing Standard* home page at [www.nursing-standard.co.uk](http://www.nursing-standard.co.uk). For related articles visit our online archive and search using the keywords.

### Aims and intended learning outcomes

This article aims to give nurses and other health professionals an insight into using the *British National Formulary* (BNF). After reading this article you should be able to:

- Describe how drugs are listed in the BNF and explain what is meant by indications, cautions, side effects and contraindications.
- Use the BNF to identify contraindications and potential drug interactions.
- Explain the detection, recording and reporting of adverse drug reactions.

- Explain what is meant by unlicensed and 'off label' medicines and discuss the implications for their use.
- Discuss national and local prescription writing standards and write a prescription that is clear and unambiguous.

### Introduction

The BNF is a joint publication of the British Medical Association (BMA) and the Royal Pharmaceutical Society of Great Britain (RPSGB). It is published biannually under the authority of a Joint Formulary Committee, which comprises representatives of professional bodies (BMA and the RPSGB) and UK health departments. The BNF aims to provide prescribers, pharmacists and other healthcare professionals with thorough, up-to-date information on the use of medicines. When prescribing drugs it is an important reference guide to ensure that the correct doses are given, that no predictable interactions will occur and that no known contraindications are overlooked. Therefore, understanding how to use the publication is an essential skill for medical and non-medical prescribers. When making prescribing decisions it is vital to use the most recent edition of the BNF (2007). The BNF is also available online at: <http://BNF.org>

The BNF comprises 15 chapters, each of which is related to a particular system of the body or to an aspect of medical care, for example, chapter one in the BNF (Number 54) (2007) relates to the gastrointestinal system, and chapter three relates to the respiratory system. Each chapter is further divided into sections, and the information provided within the sections includes concise summaries of clinical conditions, as well as

Safety and Efficacy of High-Dose Vitamin B6 as an Adjunctive Treatment for Antipsychotic-Induced Hyperprolactinemia in Male Patients With Treatment-Resistant Schizophrenia

**PDF The Role of Vitamin B6 in Reducing Serum Prolactin in Comparison to .**

study variables.

Study variables	N	%
<b>History of infertility</b>		
Positive	28	46.7%
Negative	32	53.3%
Total	60	100.0%
<b>Type of infertility</b>		
Primary	13	46.4%
Secondary	15	53.6%
Total	28	100.0%
<b>History of PCOS</b>		
Positive	26	43.3%
Negative	34	56.7%
Total	60	100.0%
<b>History of galactorrhea</b>		
Positive	23	38.3%
Negative	37	61.7%
Total	60	100.0%

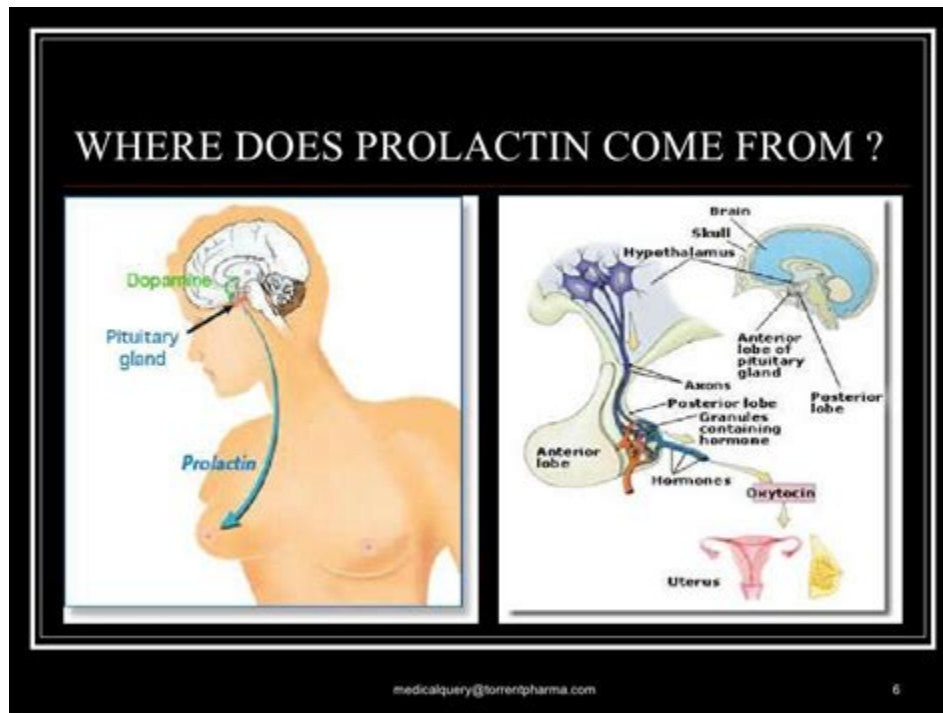
The effect of the acute intravenous administration of B6(300 mg pyridoxine chloride and 10 mg pyridoxal 5 — phosphate) on the circulating levels of pituitary hormones was investigated in humans under normal and pathologic conditions. In normal subjects maximal changes expressed as per cent of the basal levels were as follows: 52% suppression of prolactin (PRL) at 90 minutes, 18% of TSH at 90 .

## High prolactin levels: Effects, treatments, and more - Medical News Today



How common is hyperprolactinemia? Hyperprolactinemia affects less than 1% of the general population. The most common cause of hyperprolactinemia is a prolactinoma, a benign (noncancerous) prolactin-releasing tumor. Prolactinoma rates are about 30 per 100,000 in people assigned female at birth and 10 per 100,000 in people assigned male at birth.

## Prolactin: What It Is, Function & Symptoms - Cleveland Clinic



Low levels of prolactin are usually not a concern in women or men. However, very high levels of prolactin, known as hyperprolactinemia, can indicate a deeper issue. About 10 percent of the .

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