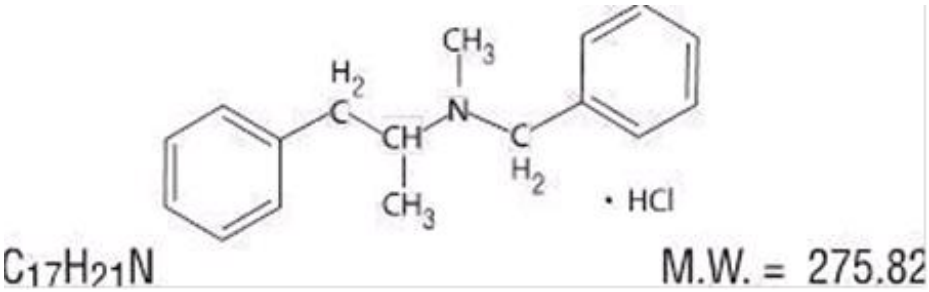
BENZPHETAMINE HYDROCHLORIDE- benzphetamine hydrochloride tablet
Apotheca Inc.

Rx Only

DESCRIPTION

Benzphetamine hydrochloride tablets 50 mg contain the anorectic agent benzphetamine hydrochloride. Benzphetamine hydrochloride is a white crystalline powder readily soluble in water and 95% ethanol. The chemical name for benzphetamine hydrochloride is d-N, α-Dimethyl-N-(phenylmethyl)-benzeneethanamine hydrochloride and its molecular weight is 275.82.

The structural formula (dextro form) is represented below:



Each Benzphetamine hydrochloride tablet for oral administration, contains 50 mg of benzphetamine hydrochloride.

Inactive Ingredients: Calcium Stearate, Polyethylene Glycol, FD&C Yellow No. 6, Lactose Anhydrous, Sorbitol.

CLINICAL PHARMACOLOGY

Benzphetamine hydrochloride is a sympathomimetic amine with pharmacologic activity similar to the prototype drugs of this class used in obesity, the amphetamines. Actions include central nervous system stimulation and elevation of blood pressure. Tachyphylaxis and tolerance have been demonstrated with all drugs of this class in which these phenomena have been looked for.

Drugs of this class used in obesity are commonly known as “anorectics” or “anorexigenics”. It has not been established however, that the action of such drugs in treating obesity is primarily one of appetite suppression. Other central nervous system actions, or metabolic effects, may be involved.

Adult obese subjects instructed in dietary management and treated with “anorectic” drugs, lose more weight on the average than those treated with placebo and diet, as determined in relatively short-term clinical trials.

The magnitude of increased weight loss of drug-treated patients over placebo-treated patients is only a fraction of a pound a week. The rate of weight loss is the greatest in the first weeks of therapy for both drug and placebo subjects and tends to decrease in succeeding weeks. The possible origins of the increased weight loss due to the various drug effects are not established. The amount of weight loss associated with the use of an “anorectic” drug varies from trial to trial, and the increased weight loss appears to be related in part to variables other than the drug prescribed, such as the physician-investigator, the population treated, and the diet prescribed. Studies do not permit conclusions as to the relative importance of the drug and non-drug factors on weight loss.

The natural history of obesity is measured in years, whereas the studies cited are restricted to a few

weeks duration; thus, the total impact of drug-induced weight loss over that of diet alone must be considered to be clinically limited.

Pharmacokinetic data in humans are not available.

INDICATIONS AND USAGE

Benzphetamine hydrochloride tablets are indicated in the management of exogenous obesity as a short term (a few weeks) adjunct in a regimen of weight reduction based on caloric restriction in patients with an initial body mass index (BMI) of 30 kg/m2 or higher who have not responded to appropriate weight reducing regimen (diet and/or exercise) alone. Below is a chart of Body Mass Index (BMI) based on various heights and weights. BMI is calculated by taking the patient's weight, in kilograms (kg), divided by the patient's height, in meters (m), squared. Metric conversions are as follows: pounds ÷ 2.2 = kg; inches × 0.0254 = meters. The limited usefulness of agents of this class (See CLINICAL PHARMACOLOGY) should be weighed against possible risks inherent in their use such as those described below.

BODY MASS INDEX (BMI), kg/m2
Height (feet, inches)

Weight (pounds)	Height (feet, inches)					
	5'0"	5'3"	5'6"	5'9"	6'0"	6'3"
140	27	25	23	21	19	18
150	29	27	24	22	20	19
160	31	28	26	24	22	20
170	33	30	28	25	23	21
180	35	32	29	27	25	23
190	37	34	31	28	26	24
200	39	36	32	30	27	25
210	41	37	34	31	29	26
220	43	39	36	33	30	28
230	45	41	37	34	31	29
240	47	43	39	36	33	30
250	49	44	40	37	34	31

Benzphetamine hydrochloride tablets are indicated for use as monotherapy only.

CONTRAINDICATIONS

Benzphetamine hydrochloride tablets are contraindicated in patients with advanced arteriosclerosis, symptomatic cardiovascular disease, moderate to severe hypertension, hyperthyroidism, known hypersensitivity or idiosyncrasy to sympathomimetic amines, and glaucoma. Benzphetamine should not be given to patients who are in an agitated state or who have a history of drug abuse.

Hypertensive crises have resulted when sympathomimetic amines have been used concomitantly or within 14 days following use of monoamine oxidase inhibitors. Benzphetamine hydrochloride tablets should not be used concomitantly with other CNS stimulants.

Benzphetamine hydrochloride tablets may cause fetal harm when administered to a pregnant woman. Amphetamines have been shown to be teratogenic and embryotoxic in mammals at high multiples of the human dose. Benzphetamine hydrochloride tablets are contraindicated in women who are or may become pregnant. If this drug is used during pregnancy, or if the patient becomes pregnant while taking this drug, the patient should be apprised of the potential hazard to the fetus.

WARNINGS

Benzphetamine hydrochloride tablets should not be used in combination with other anorectic agents, including prescribed drugs, over-the- counter preparations and herbal products.

In a case-control epidemiological study, the use of anorectic agents was associated with an increased risk of developing pulmonary hypertension, a rare, but often fatal disorder. The use of anorectic agents for longer than three months was associated with a 23-fold increase in the risk of developing pulmonary hypertension. Increased risk of pulmonary hypertension with repeated courses of therapy cannot be excluded. It should be noted that benzphetamine was not specifically studied in this case-control study.

The onset or aggravation of exertional dyspnea, or unexplained symptoms of angina pectoris, syncope, or lower extremity edema suggest the possibility of occurrence of pulmonary hypertension. Under these circumstances, Benzphetamine hydrochloride tablets should be immediately discontinued, and the patient should be evaluated for the possible presence of pulmonary hypertension.

Valvular heart disease associated with the use of some anorectic agents such as fenfluramine and dexfenfluramine has been reported. Possible contributing factors include use for extended periods of time, higher than recommended dose, and/or use in combination with other anorectic drugs. However, no cases of this valvulopathy have been reported when benzphetamine has been used alone.

The potential risk of possible serious adverse effects such as valvular heart disease and pulmonary hypertension should be assessed carefully against the potential benefit of weight loss. Baseline cardiac evaluation should be considered to detect pre-existing valvular heart diseases or pulmonary hypertension prior to initiation of benzphetamine treatment. Benzphetamine hydrochloride tablets are not recommended in patients with known heart murmur or valvular heart disease. Echocardiogram during and after treatment could be useful for detecting any valvular disorders which may occur. To limit unwarranted exposure and risks, treatment with Benzphetamine hydrochloride tablets should be continued only if the patient has satisfactory weight loss within the first 4 weeks of treatment (i.e., weight loss of at least 4 pounds, or as determined by the physician and patient).

When tolerance to the anorectic effect develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued.

Benzphetamine hydrochloride tablets are not recommended for severely hypertensive patients or for patients with symptomatic cardiovascular disease including arrhythmias.

Benzphetamine hydrochloride tablets are not recommended for patients who used any anorectic agents within the prior year.

PRECAUTIONS

General

Insulin requirements in diabetes mellitus may be altered in association with use of anorexigenic drugs and the concomitant dietary restrictions.

Psychological disturbances have been reported in patients who receive an anorectic agent together with a restrictive dietary regime.

Caution is to be exercised in prescribing amphetamines for patients with even mild hypertension. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage.

Information for Patients

Amphetamines may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly.

Drug Interactions

Efficacy of Benzphetamine hydrochloride tablets in combination with other anorectic agents has not been studied and the combined use may have the potential for serious cardiac problems.

Hypertensive crises have resulted when sympathomimetic amines have been used concomitantly or within 14 days following use of monoamine oxidase inhibitors. Benzphetamine hydrochloride tablets should not be used concomitantly with other CNS stimulants.

Amphetamines may decrease the hypotensive effects of antihypertensives. Amphetamines may enhance the effects of tricyclic antidepressants.

Urinary alkalinizing agents increase blood levels and decrease excretion of amphetamines. Urinary acidifying agents decrease blood levels and increase excretion of amphetamines.

Carcinogenesis, Mutagenesis, Impairment of Fertility

Animal studies to evaluate the potential for carcinogenesis, mutagenesis or impairment of fertility have not been performed.

Pregnancy

Pregnancy Category X (see CONTRAINDICATIONS section).

Nursing Mothers

Amphetamines are excreted in human milk. Mothers taking amphetamines should be advised to refrain from nursing.

Pediatric Use

Safety and effectiveness in pediatric patients have not been established. Use of benzphetamine hydrochloride is not recommended in individuals under 12 years of age.

Geriatric Use

Clinical studies of Benzphetamine hydrochloride tablets did not include sufficient numbers of subjects aged 65 and over to establish safety and efficacy in this population. In general, dose selection for an elderly patient should be cautious, usually starting at the low end of the dosing range, reflecting the greater frequency of decreased hepatic, renal, or cardiac function, and of concomitant disease or other drug therapy.

ADVERSE REACTIONS

The following have been associated with the use of benzphetamine hydrochloride:

Cardiovascular

Palpitation, tachycardia, elevation of blood pressure.

There have been isolated reports of cardiomyopathy and ischemic cardiac events associated with chronic amphetamine use.

Valvular heart disease associated with the use of some anorectic agents such as fenfluramine and dexfenfluramine, both independently and especially when used in combination with other anorectic drugs, have been reported. However, no cases of this valvulopathy have been reported when Benzphetamine hydrochloride tablets have been used alone.

CNS

Overstimulation, restlessness, dizziness, insomnia, tremor, sweating, headache; rarely, psychotic episodes at recommended doses; depression following withdrawal of the drug.

Gastrointestinal

Dryness of the mouth, unpleasant taste, nausea, diarrhea, other gastrointestinal disturbances.

Allergic

Urticaria and other allergic reactions involving the skin.

Endocrine

Changes in libido.

DRUG ABUSE AND DEPENDENCE

Benzphetamine is a controlled substance under the Controlled Substance Act by the Drug Enforcement Administration and has been assigned to Schedule III.

Benzphetamine hydrochloride is related chemically and pharmacologically to the amphetamines. Amphetamines and related stimulant drugs have been extensively abused, and the possibility of abuse of Benzphetamine Hydrochloride Tablets should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with intense psychological dependence and severe social dysfunction. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxication is psychosis, often clinically indistinguishable from schizophrenia.

OVERDOSAGE

Manifestations of Overdosage: Acute overdosage with amphetamines may result in restlessness, tremor, tachypnea, confusion, assaultiveness and panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension, and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Hyperpyrexia and rhabdomyolysis have been reported and can lead to a number of associated complications. Fatal poisoning is usually preceded by convulsions and coma.

Treatment of Overdosage: (See WARNINGS) - information concerning the effects of overdosage with Benzphetamine hydrochloride tablets is extremely limited. The following is based on experience with other anorexiants.

Management of acute amphetamine intoxication is largely symptomatic and includes sedation with a barbiturate. If hypertension is marked, the use of a nitrite or rapidly acting alpha receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.

Acidification of the urine increases amphetamine excretion.

The oral LD50 is 174 mg/kg in mice and 104 mg/kg in rats. The intraperitoneal LD50 in mice is 153 mg/kg.

DOSAGE AND ADMINISTRATION

Dosage should be individualized according to the response of the patient. The suggested dosage ranges from 25 to 50 mg one to three times daily. Treatment should begin with 25 to 50 mg once daily with subsequent increase in individual dose or frequency according to response. A single daily dose is preferably given in mid-morning or mid-afternoon, according to the patient's eating habits. In an

occasional patient it may be desirable to avoid late afternoon administration. Use of benzphetamine hydrochloride is not recommended in individuals under 12 years of age.

HOW SUPPLIED

Benzphetamine hydrochloride tablets are supplied as follows 50mg (peach,round,imprinted with BP 650, scored)

NDC 12634-118-00 Bottles of 10

NDC 12634-118-01 Bottles of 100

NDC 12634-118-09 Bottles of 35

NDC 12634-118-12 Bottles of 120

NDC 12634-118-18 Bottles of 180

NDC 12634-118-40 Bottles of 40

NDC 12634-118-42 Bottles of 42

NDC 12634-118-45 Bottles of 45

NDC 12634-118-50 Bottles of 50

NDC 12634-118-52 Blister Pack of 12

NDC 12634-118-54 Blister Pack of 14

NDC 12634-118-57 Blister Pack of 20

NDC 12634-118-59 Blister Pack of 30

NDC 12634-118-60 Bottles of 60

NDC 12634-118-61 Blister Pack of 10

NDC 12634-118-63 Blister Pack of 3

NDC 12634-118-66 Blister Pack of 6

NDC 12634-118-67 Blister Pack of 7

NDC 12634-118-69 Blister Pack of 9

NDC 12634-118-71 Bottles of 30

NDC 12634-118-74 Bottles of 24

NDC 12634-118-78 Bottles of 28

NDC 12634-118-79 Bottles of 25

NDC 12634-118-80 Bottles of 20

NDC 12634-118-81 Bottles of 21

NDC 12634-118-82 Bottles of 12

NDC 12634-118-84 Bottles of 14

NDC 12634-118-85 Bottles of 15

NDC 12634-118-90 Bottles of 90

NDC 12634-118-91 Blister Pack of 1

NDC 12634-118-92 Bottles of 2

NDC 12634-118-93 Bottles of 3

NDC 12634-118-94 Bottles of 4

NDC 12634-118-95 Bottles of 5

NDC 12634-118-96 Bottles of 6

NDC 12634-118-97 Bottles of 7

NDC 12634-118-98 Bottles of 8

NDC 12634-118-99 Bottles of 9

KEEP THIS AND ALL MEDICATIONS OUT OF THE REACH OF CHILDREN.

Call your doctor for medical advice about side effects. You may report side effects to the FDA at 1-800-FDA-1088.

Storage and Handling

Store at 20° to 25°C (68° to 77° F) [see USP controlled room temperature].

Rx only

Manufactured for:

Boca Pharmacal, LLC

Coral Springs, FL 33065

1-800-354-8460

www.bocapharmacal.com

Rev. 08/13

Repackaged & Distributed by:

Apotheca Inc.

Phoenix, AZ 85006

PACKAGE LABEL.PRINCIPAL DISPLAY PANEL

BENZPHETAMINE HYDROCHLORIDE

benzphetamine hydrochloride tablet

Product Information

Product Type	HUMAN PRESCRIPTION DRUG	**Item Code (Source)**	NDC:12634-118(NDC:64376-650)
Route of Administration	ORAL	**DEA Schedule**	CIII

Active Ingredient/Active Moiety

Ingredient Name	Basis of Strength	Strength
BENZPHETAMINE HYDROCHLORIDE (UNII: 43DWT87QT7) (BENZPHETAMINE - UNII:0M3S43XK27)	BENZPHETAMINE HYDROCHLORIDE	50 mg

Inactive Ingredients

Ingredient Name	Strength
CALCIUM STEARATE (UNII: 776XM7047L)	
FD&C YELLOW NO. 6 (UNII: H77VEI93A8)	
LACTOSE (UNII: J2B2A4N98G)	
POLYETHYLENE GLYCOL 3350 (UNII: G2M7P15E5P)	
SORBITOL (UNII: 506T60A25R)	

Product Characteristics

Color	yellow (Peach)	**Score**	2 pieces
Shape	ROUND	**Size**	10mm
Flavor		**Imprint Code**	BP;650
Contains			

Packaging

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:12634-118-00	10 in 1 BOTTLE; Type 0: Not a Combination Product	09/07/2010	
2	NDC:12634-118-01	100 in 1 BOTTLE; Type 0: Not a Combination Product	09/07/2010	
3	NDC:12634-118-09	35 in 1 BOTTLE; Type 0: Not a Combination Product	09/07/2010	
4	NDC:12634-118-12	120 in 1 BOTTLE; Type 0: Not a Combination Product	09/07/2010	
5	NDC:12634-118-18	180 in 1 BOTTLE; Type 0: Not a Combination Product	09/07/2010	
6	NDC:12634-118-40	40 in 1 BOTTLE; Type 0: Not a Combination Product	09/07/2010	
7	NDC:12634-118-42	42 in 1 BOTTLE; Type 0: Not a Combination Product	09/07/2010	
8	NDC:12634-118-45	45 in 1 BOTTLE; Type 0: Not a Combination Product	09/07/2010	
9	NDC:12634-118-50	50 in 1 BOTTLE; Type 0: Not a Combination Product	09/07/2010	
10	NDC:12634-118-52	12 in 1 BLISTER PACK; Type 0: Not a Combination Product	09/07/2010	
11	NDC:12634-118-54	14 in 1 BLISTER PACK; Type 0: Not a Combination Product	09/07/2010	
12	NDC:12634-118-57	20 in 1 BLISTER PACK; Type 0: Not a Combination Product	09/07/2010	
13	NDC:12634-118-59	30 in 1 BLISTER PACK; Type 0: Not a Combination Product	09/07/2010	
14	NDC:12634-118-	60 in 1 BOTTLE; Type 0: Not a Combination Product	09/07/2010	

14	60	60 in 1 BOTTLE; Type 0: Not a Combination Product	09/07/2010	
15	NDC:12634-118-61	10 in 1 BLISTER PACK; Type 0: Not a Combination Product	09/07/2010	
16	NDC:12634-118-63	3 in 1 BLISTER PACK; Type 0: Not a Combination Product	09/07/2010	
17	NDC:12634-118-66	6 in 1 BLISTER PACK; Type 0: Not a Combination Product	09/07/2010	
18	NDC:12634-118-67	7 in 1 BLISTER PACK; Type 0: Not a Combination Product	09/07/2010	
19	NDC:12634-118-69	9 in 1 BLISTER PACK; Type 0: Not a Combination Product	09/07/2010	
20	NDC:12634-118-71	30 in 1 BOTTLE; Type 0: Not a Combination Product	09/07/2010	
21	NDC:12634-118-74	24 in 1 BOTTLE; Type 0: Not a Combination Product	09/07/2010	
22	NDC:12634-118-78	28 in 1 BOTTLE; Type 0: Not a Combination Product	09/07/2010	
23	NDC:12634-118-79	25 in 1 BOTTLE; Type 0: Not a Combination Product	09/07/2010	
24	NDC:12634-118-80	20 in 1 BOTTLE; Type 0: Not a Combination Product	09/07/2010	
25	NDC:12634-118-81	21 in 1 BOTTLE; Type 0: Not a Combination Product	09/07/2010	
26	NDC:12634-118-82	12 in 1 BOTTLE; Type 0: Not a Combination Product	09/07/2010	
27	NDC:12634-118-84	14 in 1 BOTTLE; Type 0: Not a Combination Product	09/07/2010	
28	NDC:12634-118-85	15 in 1 BOTTLE; Type 0: Not a Combination Product	09/07/2010	
29	NDC:12634-118-90	90 in 1 BOTTLE; Type 0: Not a Combination Product	09/07/2010	
30	NDC:12634-118-91	1 in 1 BLISTER PACK; Type 0: Not a Combination Product	09/07/2010	
31	NDC:12634-118-92	2 in 1 BOTTLE; Type 0: Not a Combination Product	09/07/2010	
32	NDC:12634-118-93	3 in 1 BOTTLE; Type 0: Not a Combination Product	09/07/2010	
33	NDC:12634-118-94	4 in 1 BOTTLE; Type 0: Not a Combination Product	09/07/2010	
34	NDC:12634-118-95	95 in 1 BOTTLE; Type 0: Not a Combination Product	09/07/2010	
35	NDC:12634-118-96	6 in 1 BOTTLE; Type 0: Not a Combination Product	09/07/2010	
36	NDC:12634-118-97	7 in 1 BOTTLE; Type 0: Not a Combination Product	09/07/2010	
37	NDC:12634-118-98	8 in 1 BOTTLE; Type 0: Not a Combination Product	09/07/2010	
38	NDC:12634-118-99	9 in 1 BOTTLE; Type 0: Not a Combination Product	09/07/2010	

Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
ANDA	ANDA040747	09/07/2010	

Labeler - Apotheca Inc. (051457844)

Establishment

Name	Address	ID/FEI	Business Operations
Apotheca Inc.		051457844	relabel(12634-118) , repack(12634-118)