Natural ZZZs is formulated to induce the relaxation needed to support better sleep for those suffering from temporary sleeplessness. The formula is especially suited to help those with difficulty falling asleep due to restlessness. Valerian root is one of the most widely known herbs used to help with sleep related issues, and has been shown to produce a state of relaxation in many people. Passionflower and jujube have been used historically to produce a state of relaxation, and have been used in those with overstimulation and scattered thoughts. L-theanine, an amino acid that is found in green tea, is associated with soothing properties. Two capsules of Natural ZZZs includes 450 mg valerian root extract, 300 mg jujube seed extract, 200 mg passionflower extract and 100 mg L-theanine.

Overview
Busy and stressful lifestyles can cause sleep patterns to become disrupted leading to over-stimulation and restlessness. Gamma-aminobutyric acid (GABA), the chief inhibitory neurotransmitter in the central nervous system (CNS), plays a role in regulating neuronal excitability throughout the nervous system. The ingredients in Natural ZZZs work in synergy by supporting GABA activity. This includes inhibiting GABA’s reuptake or the binding of the GABA receptor, allowing for more optimal relaxation. While other therapies with a similar mechanism may cause dependency when used over an extended period of time, the natural ingredients in Natural ZZZs are non-habit forming.

Valerian Root Extract (0.8%)†
Perhaps the most studied botanical for inducing sleep, valerenic acid, an active component in valerian root, has spasmylytic and muscle relaxant properties. It has been found to both inhibit the reuptake of and stimulates the release of GABA in the CNS.\[^1^,^2^\] Other components within valerian extracts have been found to bind GABA receptors. Randomized trials consistently show significant benefits to supplementing valerian over placebo.\[^3^\] One randomized, double-blind, placebo-controlled trial comparing 600 mg/day of valerian extract given with another therapy for six weeks showed valerian root extract to be equally effective in supporting sleeplessness as another commonly used therapy.\[^4^\]

Passionflower Extract†
The aerial portions of passionflower are best known for their historic use as a relaxing and calming herb. Numerous flavonoid components function as active ingredients,\[^5^\] most by binding to the GABA receptor.\[^6^,^7^\] Passionflower extract has compared favorably with other therapies with similar mechanisms in easing feelings of overstimulation and scattered thoughts, with fewer side effects.\[^8^\] A randomized, placebo-controlled trial of 60 people, aged 25-55 years, scheduled for spinal anesthesia showed those given passionflower experienced a greater sense of calmness before being given anesthesia.\[^9^\] Passionflower has also been shown to offer benefits for sleep for adults with fluctuations in sleep quality.\[^10^\]

L-Theanine†
L-theanine is the popular name for the chemical gamma-glutamylethylamide, an amino acid found in green tea, and is considered a relaxant (although not a sedative) when used alone. The theanine in Natural ZZZs, Suntheanine®, is structurally identical to the L-theanine compound found in green and black teas. The Food and Drug Administration has approved several structure/function claims for theanine, including: stress reduction, relaxation without drowsiness,
decreased nervousness from common fatigue, and reduces nervous irritability. L-theanine has been shown to inhibit the effects of caffeine in animal models,[11] and increases alpha-brain wave activity, a sign of induced relaxation.

**Jujube Extract**
Wild jujube seed has been historically used in traditional Chinese medicine as a sedative herb. It has been shown to calm, relax, reduce stress, conserve energy, and promote sleep and is useful for those with symptoms of nervous exhaustion, fatigue, irritability and the inability to sleep. Wild jujube has also been found to benefit the liver.[12] (Note: Most research on the active components (jujubosides A and B) for sedative and CNS function have been performed in China and are written in Chinese.)[13-16]

**Directions**
2 capsules one hour before sleep or as recommended by your health care professional.

**Does Not Contain**
Gluten, yeast, artificial colors and flavors.

**Cautions**
Do not consume this product if you are pregnant or nursing. Consult your physician for further information.

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**Supplement Facts**

<table>
<thead>
<tr>
<th>Serving Size 2 Capsules</th>
<th>Amount Per Serving</th>
<th>% Daily Value</th>
</tr>
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<tbody>
<tr>
<td>2 capsules contain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valerian Root Extract</td>
<td>450 mg</td>
<td>*</td>
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<tr>
<td>(Standardized to contain 0.8% Valerenic Acids)</td>
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<tr>
<td>Jujube Seed Extract</td>
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<tr>
<td>(Standardized to contain 2% Triterpene Saponins)</td>
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<tr>
<td>Passionflower [aerial portion] Extract</td>
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<tr>
<td>(Standardized to contain 3.5% Flavonoids)</td>
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<tr>
<td>L-Theanine</td>
<td>100 mg</td>
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</tr>
</tbody>
</table>

* Daily Value not established

ID# 521030 30 Capsules
ID# 521060 60 Capsules

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**References**

12. Drago Herbs Website: www.dra droherbs.com/wildjujube2.htm