

# A Nurse Practitioner's Perspective on OTC Analgesia

Over-the-counter (OTC) analgesics, including acetaminophen and nonsteroidal anti-inflammatory drugs (NSAIDs), are often an appropriate treatment option for patients experiencing mild to moderate pain. Certain OTC analgesics may exacerbate some coexisting conditions or interact with other medications patients are taking. Given the potential impact on patients, it is important to consider the following factors when making an OTC analgesic recommendation:



## Considerations for NSAIDs

<b>Coexisting medical conditions</b>	NSAIDs have been reported to increase the risk of cardiovascular (CV) events, such as hypertension, stroke, congestive heart failure, and myocardial infarction. <sup>1,2</sup> Other potential effects include exacerbation of asthma, <sup>3</sup> increased risk of stomach bleeding, <sup>4</sup> and development of acute renal failure in patients with renal risk factors. <sup>5,6</sup>
<b>Concomitant medications</b>	Ibuprofen competes with aspirin in binding to the cyclooxygenase type 1 enzyme and can therefore reduce the cardioprotective effect of low-dose aspirin therapy. <sup>7,8</sup> Use of anticoagulants, steroids, or multiple NSAIDs may increase the risk of gastrointestinal (GI) events such as GI bleeding. <sup>4,9,10</sup>
<b>Other considerations</b>	Older patients have an increased risk of certain NSAID-associated conditions, as mentioned above, such as CV events, stomach bleeding, and kidney disease. <sup>4,6,11</sup> Patients who consume 3 or more alcoholic beverages every day may be at increased risk for GI events when taking NSAIDs. <sup>4</sup>
<b>Dosing</b>	The maximum daily dose of common OTC NSAIDs, according to the Drug Facts labels, is 4000 mg for aspirin, 1200 mg for ibuprofen, and 660 mg for naproxen sodium. NSAIDs should be given at the lowest effective dose for the shortest period of time. <sup>12</sup>



## Considerations for acetaminophen

<b>Concomitant medications</b>	Patients taking warfarin are advised to consult their healthcare professional before using acetaminophen, as this can increase the risk of bleeding. <sup>4</sup>
<b>Other considerations</b>	Patients who consume 3 or more alcoholic beverages every day may be at risk for severe liver damage when taking acetaminophen. <sup>4</sup>
<b>Dosing</b>	Exceeding the maximum recommended daily dose of 4000 mg poses a risk of liver damage and may occur when patients take OTC or prescription medications containing acetaminophen in addition to the recommended analgesic.



## Counseling patients on their recommended OTC analgesic

It is important for patients to understand why a particular OTC analgesic was recommended and how the dose was individualized for them. Given the range of formulations of OTC products available to patients, it is necessary to clearly communicate the exact strength and dose of the recommended product. Counseling patients on the safe use of OTC analgesics can help them manage their pain both safely and effectively.

**“When we recommend a product, we need to ensure that the patient understands the dosing we are recommending and why.”**



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## References

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